



## Attracting Beneficial Insects



A researcher at UC Davis observed 32 different native bee species pollinating sunflowers.

Bees have been making headlines, and not in a good way. All across the country, honeybees are abruptly and mystifyingly disappearing—a phenomenon known as *colony collapse disorder*. The positive upshot of this unexplained decline of the honeybee is a general uplifting of consciousness about the value of pollinators of all kinds, and an awareness of the things gardeners can do that will help sustain their populations. Growing a bee-friendly garden, an almost unthinkable concept in years past, has become an aspiration for many.

which includes lady beetles, lacewings, syrphid and tachinid flies, and parasitic and predatory wasps, among others. Many of these predators and pollinators have similar needs: nectar, pollen, water, shelter from the wind. Planting flowers and herbs from seed will fill those needs easily and efficiently. And an extra bonus comes from providing nectar and pollen for beneficial insects—success is a beautiful sight!

This burgeoning awareness has propelled native bees onto the “most-wanted list” of beneficial insects,

### General Rules for Bringing In the Right Bugs

Yes, you can purchase mail-order bags of lady beetles and lacewing eggs and release them into your garden. The difficulty lies in keeping them there. Better to expend your energy to create a habitat that will attract a diverse population of desirable insects and sustain them from their larval stage to adulthood. The best and simplest strategy is to have flowers in bloom from spring through fall. Much research has been done on the types of flowers that are *most* effective in attracting the *right* kinds of insects, but a short list of general rules can help gardeners make intelligent choices intuitively:



Asclepias is a host plant for the oleander aphid, which in turn provides food for syrphid fly, lacewing, and lady beetle larvae, as well as parasitic wasps.

1. Tiny clusters of flowers with exposed nectaries (think Queen Anne’s Lace) attract a wide variety of beneficial insects.
2. Many insects prefer flowers with a single row of petals over those that have two or more rows.
3. Flowers of diverse colors and forms will attract a diverse population of pollinators.
4. Tall groupings of plants provide insects with shelter from drying winds.

**Top annual flowers and herbs for attracting beneficial insects:**

**Dill:** lady beetles, syrphid flies, predatory and parasitic wasps

**Cilantro:** lady beetles, syrphid flies, parasitic wasps

**Sweet alyssum:** syrphid flies

**Sunflowers:** bees and predatory wasps

**Buckwheat:** syrphid flies, lady beetles

5. Culinary herbs such as thyme, oregano, cilantro, and dill are attractive to many pollinators and predaceous insects when allowed to flower.
6. Insect predators require prey—lady beetles will not stick around if there are no aphids. Accept a few pest insects as a necessary part of keeping things in balance.



Sow dill and cilantro every 3-4 weeks for a continuous supply of nectar and pollen.

### Mind the Gaps

A gap in your garden's nectar and pollen supply will send beneficial insects flying to your neighbor's yard. Don't let that happen! It's not difficult to have plants in bloom throughout the growing season if you think about planting successive patches of fast-growing flowering plants. Good candidates for succession planting are sunflowers, herbs such as arugula, cilantro, and dill, and vegetables such as gourds and squash. In a pinch, plant patches of annual buckwheat every few weeks. Not only do the tall, fast-growing plants provide beneficial insects with shelter in bad weather, they go from seed to bloom in little more than a month.



### Your Garden Ally – the Flower Fly

Syrphid flies, a.k.a. hoverflies or flower flies, have been the focus of much vegetable farming research, for good reason. Strong fliers with the ability to hover above plants, they are ideally suited for finding and destroying aphid colonies. Adults, which resemble bees and wasps, lay their eggs singly on leaves near aphid colonies. Maggot-shaped syrphid larvae hatch in about 3 days, and consume hundreds of aphids each.

Adult flower flies need nectar and pollen in order to reproduce; larvae require aphids to develop into adults. So if you grow bok choy, lettuce, roses, peas, or any of the many other plant species that host aphids, be sure to sow seeds of sweet alyssum, buckwheat, and carrot family plants such as dill and cilantro, to supply nectar and pollen for this helpful predator.

## Easy From Seed: Early, Mid-season, and Late Blooming Plants that Attract Beneficial Insects

### Early

Arugula ( <i>Eruca sativa</i> )	Columbine ( <i>Aquilegia</i> spp.)
Basket-of-Gold ( <i>Aurinia saxatilis</i> )	Lovage ( <i>Levisticum officinale</i> )
California Poppy ( <i>Eschscholzia californica</i> )	Sage ( <i>Salvia officinalis</i> )
Candytuft ( <i>Iberis sempervirens</i> )	Sweet Alyssum ( <i>Lobularia maritima</i> )
Chamomile ( <i>Matricaria recutita</i> )	

### Mid-Season

Arugula ( <i>Eruca sativa</i> )	Dill ( <i>Anethum graveolens</i> )
Asclepias ( <i>Asclepias curassavica</i> )	Fennel ( <i>Foeniculum vulgare</i> )
Baby's Breath ( <i>Gypsophila muralis</i> )	Feverfew ( <i>Chrysanthemum parthenium</i> )
Basil ( <i>Ocimum basilicum</i> )	Marigold ( <i>Tagetes tenuisecta</i> )
Bishops Lace ( <i>Ammi majus</i> )	Mustards ( <i>Brassica juncea</i> )
Borage ( <i>Borago officinalis</i> )	Nasturtium ( <i>Tropaeolum majus</i> )
Buckwheat ( <i>Eriogonum annuum</i> )	Oregano ( <i>Origanum</i> spp.)
Calendula ( <i>Calendula officinalis</i> )	Squash ( <i>Cucurbita</i> spp.)
Cilantro ( <i>Coriandrum sativum</i> )	Sunflower ( <i>Helianthus annuus</i> )
Clary Sage ( <i>Salvia horminum</i> )	Tithonia ( <i>Tithonia rotundifolia</i> )
Cosmos ( <i>Cosmos sulphureus</i> , <i>C. bipinnatus</i> )	Tomatillo ( <i>Physalis philadelphica</i> )

### Late

Arugula ( <i>Eruca sativa</i> )	Gourds ( <i>Cucurbita pepo</i> )
Cilantro ( <i>Coriandrum sativum</i> )	Squash ( <i>Cucurbita</i> spp.)
Cosmos ( <i>Cosmos sulphureus</i> , <i>C. bipinnatus</i> )	Sunflower ( <i>Helianthus annuus</i> )
Dill ( <i>Anethum graveolens</i> )	