

## Be a Beneficial Gardener – Support Your Local Insects!

Imagine being an insect in your yard. You are an active member of your local community of insects, who classify the resident human gardener, Ben, as “beneficial” rather than “pestiferous.” Ben’s overall attitude toward insects is one of acceptance, appreciation and sometimes even awe. Ben carries a folding 10-power hand lens, the better to observe the tiniest of his insect allies in the garden. In addition to learning about insects by watching them in action (and at rest), Ben uses books and the computer to learn more about how insects live and what they need to prosper. Long ago he decided to avoid using pesticides. Providing a diversity of plants in his garden to welcome many kinds of insects was easy for Ben - he loves plants. However, it was a challenge to trust the insects to take care of themselves without human interference. With respect to the insects, Ben now views himself as a facilitator: he provides what they need. In return, the insects are working to make Ben’s garden as harmoniously balanced as possible.

Our gardens should all be like Ben’s: complex ecosystems composed of many different types of plants which invite many different types of insects, and ultimately result in less work for the gardener. Sara Stein, author of *Noah’s Garden*, puts it beautifully:

The greater the number of plant species one grows, the greater the number of herbivorous insect species one supports and the more reliable the population of pathogens and predatory insects that control them. Only the scale is different from the game of fox and voles, for “habitat” in the case of a chewing or sucking insect is its host plant – its goldenrod, milkweed, willow or birch.

So let us plant a meadow, a hedgerow, a sufficiency and variety of food. Let there proliferate the soft eggs and squishy bodies that are the lady beetle’s meat.

Now, bring on the predators.

### Identify your bugs

Walk around your property with the goal of spotting insects. After you are familiar with the larger ones, take a hand lens with you and acquaint yourself with the tiny ones. You’ll probably need some resources with good color photographs in order to identify some of the insects in your garden.

Our Clark County (Washington state) Public Works *Clean Water Program* has published a packet of twenty-some cards with color illustrations and information about “Bugs and Pests: the Good, the Bad, and the Downright Ugly.” The set is easy to take to the garden with you. To request your own packet, call 360-397-6118, extension 4362.

The King County (Seattle, Washington, area) Hazardous Waste Department’s online article “Make friends with your beneficial insects” has good color photos of insects commonly found in Pacific Northwest gardens.

Farmer Fred's online article from California, 'Plants That Attract Beneficial Insects', has pictures and drawings of insects that are common to the Pacific Northwest as well. [http://www.farmerfred.com/plants\\_that\\_attract\\_benefi.html](http://www.farmerfred.com/plants_that_attract_benefi.html)

The Illinois Natural History Survey publishes four different sets of 31 or 32 laminated cards each, on these topics:

- Natural Enemies of Insects ([The Good Guys!](#))
- Insect Pests of Yards, Gardens and Agricultural Areas ([The Bad Guys! Set #1](#))
- Landscape Pests ([The Bad Guys! Set #2](#))
- Household Pests ([The Ugly Guys!](#))

[View the cards online!](#)

## Lay out the welcome mat

Once you know some of the insects residing in your garden, try to assure them food, water and shelter; and try to attract other species as well.

Keep the soil covered with either plants or mulch to add diversity to the garden, protect the soil surface and provide habitat for ground-dwelling insects. Ground beetles and rove beetles hide and hibernate in mulch; under small logs or rocks; in and around permanent pathways; and in low ground covers. The adult beetles hunt and dine on soil-dwelling pests, including slugs and snails, and their eggs and larvae. You can view pictures of ground beetles that are commonly found in Western Washington gardens in the online article [Predacious Ground Beetles](#). Read more about the benefits of shading the soil in *Common-Sense Pest Control*, pages 472-473.

Your yard should have protected areas that are deliberately not mowed, tilled or otherwise disturbed: beds of perennials (with an emphasis on pollen- and nectar-producing plants); hedgerows near the vegetable garden and flower beds; and plots of cover crops like alfalfa, soybeans, hairy vetch, clover and the like. Ideally, most of the vegetables and flowers should be planted in raised beds that are never tilled.

Many insects prefer sunny sites. They need shallow pans of water, or bird baths filled to within two inches of the top with gravel and small stones, and then topped off with water. The high-protein, high-sugar diet that flower pollen and nectar can provide should be available from early spring until late fall. For information on flowering plants recommended for attracting beneficial insects, consult the list at the end of this article; Farmer Fred Hoffman's online article, [Plants That Attract Beneficial Insects](#); the book *Common-Sense Pest Control*, pages 471-473; and Robert Kourik's book, *Designing and Maintaining Your Edible Landscape Naturally*.

Plants in the parsley family (like carrots, dill and cilantro) and the sunflower family (like daisy, dandelion, and zinnia) are good choices for beneficial insects. The parsley relatives have clusters of tiny flowers arranged in an umbrella shape; for this reason, they are sometimes referred to as umbellifers. Each flower produces generous amounts of nectar for a short period of time. The sunflower relatives do not produce as much nectar as those of the parsley family, but the flowers mature over a longer period, thus extending the time when nectar is available. The members of this family are classified as composites, because they have many tiny flowers arranged in one large "composition."

To help meet the goal of having flowering plants from early spring through late fall, Eric Grissell advises us to visit local nurseries weekly, noting which blooms are attracting insects. Having these plants in your yard may not be sufficient to supply all the needs of some insects, but it will be a good start. Pre-adult stages of an insect's life cycle need leaves, stems and roots of specific plants; adults generally need pollen and nectar.

We gardeners must agree with Eric Grissell that "It is in our best interest to let the bugs work out their own methods of population control with as little interference from us as possible." When we foresee plant damage that might exceed our aesthetic threshold, we should place barriers (like fabric row covers in the vegetable garden); manually remove either the offending insects or the plant that is so attractive to those insects; and plant vegetables and other annuals to avoid peak periods of activity of a particular insect. We can also try "invisible gardening", especially with vegetables. Quantities of the same plant in one spot invite insects to feed, partially by a strong concentration of volatile substances secreted into the air. Try to separate plants of the same type, both in space and in time when it is possible, to minimize this effect, and you will be gardening "invisibly". Avoid highlighting plants by surrounding them with bare soil; use mulch or low-growing ground covers.

The home gardener's **aesthetic threshold** is similar to the commercial grower's **economic threshold**. Many plants can lose one fourth of their leaf surface without serious risk of dying. Insect damage to plants is often in the eye of the beholder. Turn the compost; go to the mall; pray for tolerance; but leave the insecticides on the shelf at the store. There is often a sizeable gap in time between the observation of plant damage and the observation of the beneficial insects that will begin to control the culprits. If a plant is healthy and not too young, chances are very good that it will survive infestation.

Aim to be a conscientious steward of your environment. Reaching for the insecticide has ramifications that we probably do not even comprehend. Getting to know and appreciate the insects in your yard may yield more pleasure than you can imagine. "When you kill a bug, you inherit its work".

## Flowering Plants for Garden Insects

Alfalfa (*Medicago sativa*) – in a border or plot

Angelica (*Angelica archangelica*)

Anise (*Pimpinella anisum*), an herb

Anthemis (*Anthemis Tinctoria Kelwayi*); a perennial; re-seeds readily

Argula (*Erica vesicaria* subsp. *sativa*); allow to flower

Baby Blue Eyes (*Nemophila menziesii*)

Black Locust (*Robinia pseudoacacia*)

Blanket Flower (*Gaillardia grandiflora*)

Blazing Star, Gayfeather (*Liatrus* spp.)

Blue Lace Flower (*Trachymene caerulea*)

Broccoli (*Brassica oleracea*); allow to flower

Buckthorn (*Rhamnus* sp.)

Buckwheat (*Fagopyrum Esculentum*); best grown in a permanent but separate patch

Butterfly weed (*Asclepias tuberosa*)  
California buckwheat (*Eriogonum* sp.)  
Candytuft (*Iberis umbellata*)  
Caraway (*Carum Carvi*); annual herb; start indoors or direct sow  
Carrot (*Daucus carota sativus*); biennial vegetable - allow second-year plants to flower  
Catnip (*Nepeta cataria*); perennial herb  
Cephalaria (*Cephalaria gigantea*)  
Chamomile (*Anthemis nobilis*)  
Chervil (*Anthriscus cerefolium*)  
Coneflower (*Echinacea purpurea*)  
Coreopsis (*Coreopsis* sp.)  
Coriander (Cilantro), (*Coriandrum sativum*); annual herb  
Cosmos (*Cosmos bipinnatus*)  
Crimson Clover (*Trifolium incarnatum*); annual “green manure”  
Common Knotweed (*Persicaria*)  
Cumin, an herb  
Dandelion (*Taraxacum officinale*)  
Dill (*Anethum Graveolens*); easy to grow; reseeds readily  
Evening Primrose (*Oenothera laciniata* and *O. biennis*)  
Evergreen Euonymus (*Euonymus japonicus*)  
Garlic Chives (*Allium tuberosum*)  
Gloriosa daisies (*Rudbeckia hirta*)  
Golden Marguerite (*Anthemis tinctoria*)  
Goldenrod (*Solidago altissima*)  
Hairy Vetch (*Vicia villosa*); an annual “green manure”  
Lavender, an herb (*Lavandula* sp.)  
Lemon Balm (*Melissa officinalis*); perennial herb  
Lovage (*Levisticum officinale*)  
Meadow Foam (*Limnanthes Douglasii*)  
Mexican sunflower (*Tithonia tagetifolia*)  
Mexican Tea (*Chenopodium ambrosioides*)  
Mints, such as spearmint (*Mentha Spicata*); plant in containers or give lots of space  
Morning Glory (*Convolvulus minor*)  
Mustards (*Brassica hirta*; *B. juncea*)  
Parsley (*Petroselinum crispum*); biennial herb; allow to flower in its second year

Pincushion Flower (*Scabiosa caucasica*)  
Phacelia (*Phacelia tanacetifolia*)  
Raspberries and other brambles (*Rubus* sp.)  
Rosemary (*Rosmarinus officinalis*); perennial herb  
Rue (*Ruta graveolens*)  
Sage, autumn and pineapple (*Salvia greggii* and *S. elegans*)  
Scabiosa (*Scabiosa atropurpurea*)  
Shrubby Hare's Ear (*Bupleurum fruticosum*)  
Snowberry (*Symphoricarpos* sp.)  
Statice (*Limonium* sp.)  
Sunflowers (*Helianthus* sp.)  
Sweet Alyssum (*Lobularia maritima*)  
Sweet Fennel (*Foeniculum Vulgare*); culinary herb  
Sweet Marjoram (*Origanum majorana*; *Majorana hortensis*); annual culinary herb  
Tansy (*Tanacetum Vulgare*, the herb, not *Senecio Jacobaea*, the noxious weed)  
Thyme (*Thymus* sp.)  
White Clover, White Dutch Clover (*Trifolium repens*)  
White Lace Flower (*Ammi majus*); cultivated version of Queen Anne's Lace  
White Sweet Clover (*Melilotus alba*)  
Winter Savory (*Satureja montana*); perennial culinary herb  
Yarrow (*Achillea* sp.)  
Zinnias (*Zinnia* sp.)  
A wildflower assortment to provide blooms from early spring until fall  
Any nectar-producing flowers with open, single blossoms

## Resources

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