

Going Organic

By Annie Spiegelman



Before I became a Master Gardener, I stockpiled a shed full of pesticides and herbicides to destroy anything that came between my precious flowers and me. Raised and hardened in New York City, I thought weeds and insects were just undersized cockroaches. But then I was born again. Joining the Master Gardener program offered me a great opportunity to tutor under the exceptional horticultural professors at UC Davis as well as many gifted local botanists. They explained and showed how to be more efficient in the yard while still being ecologically responsible in our never-ending pursuit of the perfect garden. Their commonsense philosophy is to avoid conventional pesticides, fungicides, herbicides and fertilizers as a first line of defense against a pest or disease. (Just one granule or seed treated with Diazinon, a common household pesticide is enough to kill a small bird.).

That was eight years ago. Now, despite having planted 50 somewhat demanding English

roses in my yard, I have no need for harsh chemicals. I treat all of my plants with organic materials only. Eradicating the need for pesticides and herbicides is possible because now my garden has balance and has evolved into its own natural ecosystem.

If a skeptical Ex-Manhattanite can achieve this, believe me . . . you can too.

A garden filled with a diversity of plants will attract beneficial creatures, such as ladybugs, dragonflies, lacewings and mini-wasps, all of which feed on pests. (One lady bug can devour 5,000 aphids in its short lifetime.) When you spray your garden with a broad-spectrum pesticide, you are killing off sensitive beneficial insects like bees. Once you eliminate the beneficial bugs, surviving pests take hold and freely multiply.

(In 2001, the EPA removed the broad-spectrum pesticide, Dursban, (which contained Chlorpyrifos, which is related to nerve gas,) from the residential and professional market. In 2004, they phased out Diazinon from the residential market because they found it was more toxic to infants, children and women, than previously understood.)

A study conducted by The National Audubon Society found that homeowners are using 50% more herbicides than they did 20 years ago. Many pesticides and herbicides contain ingredients that have been listed as carcinogens. Children are more susceptible to toxic chemicals and are at a higher risk from exposure to pesticides. These chemicals travel through runoff into streams, wastewater collection and treatment plants and are highly toxic to aquatic life. Treatment plants are not designed to remove pesticides like Diazinon so when they are poured

or rinsed down drains, they eventually wind up in our local waterways.

In the horticulture *bidness*, *us-know-it-alls* refer to the healthy and most natural approach to tackling pests as "**Integrated Pest Management**" or IPM. IPM methods, which are based on extensive scientific research, focus on long-term prevention of pests and their damage through a combination of methods which include cultural (garden design), biological (beneficial organisms) and physical control (copper strips, sticky barriers etc.).

Most beneficial bugs perform their best control services and are most useful during their immature stage. However, once they reach the adult stage, these beneficial bugs feed on nectar and pollen. So, you want to have plants in your garden that are rich in pollen and nectar. Some "insectary" plants that thrive in my yard are: Aster, Calendula, California poppy, Lilac, Cosmos, Dill, Rosemary, Rudbekia, Sunflower, Yarrow and Zinnia.

When planting, make sure you choose the proper and compatible location for each plant. This is another way to prevent pests. Don't just choose a flower because you like it. Don't be a *ROOKIE!* (Well, unless, you **are** one. And in that case, we forgive you.) More of us experienced gardeners have learned the hard way. . . by repeated failure. Now we select a plant we have researched and know will thrive with the sunny or shady characteristics of our yard.

Once planted, mulch the area with leaves, bark, straw or compost to provide organic matter and bring nutrients to plants at a slow, steady flow. Mulch also conserves moisture for your plants. A four-inch layer of mulch will deter most annual weeds from growing by blocking out light and the ones that do sprout can be pulled

out more easily. (For a large area, visit your local nursery to purchase a layer of black plastic or weed control fabric to lay under the mulch.)

Bay Area Water Pollution Prevention Agencies have teamed up with Bay Area nurseries and hardware stores to help reduce the risks of pesticide use in home gardens. Next time you visit a store looking for gardening products, look out for the "**Our Water Our World**" tag near the products that are considered less toxic and safer for the environment, your family and your pets.

For more facts on pesticides showing up in our local waterways and how we can help, log on to www.mcstoppp.org. (**Marin County Stormwater Pollution Prevention Program.**)

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