



Solving Your Pest Problems Without Harming Pollinators



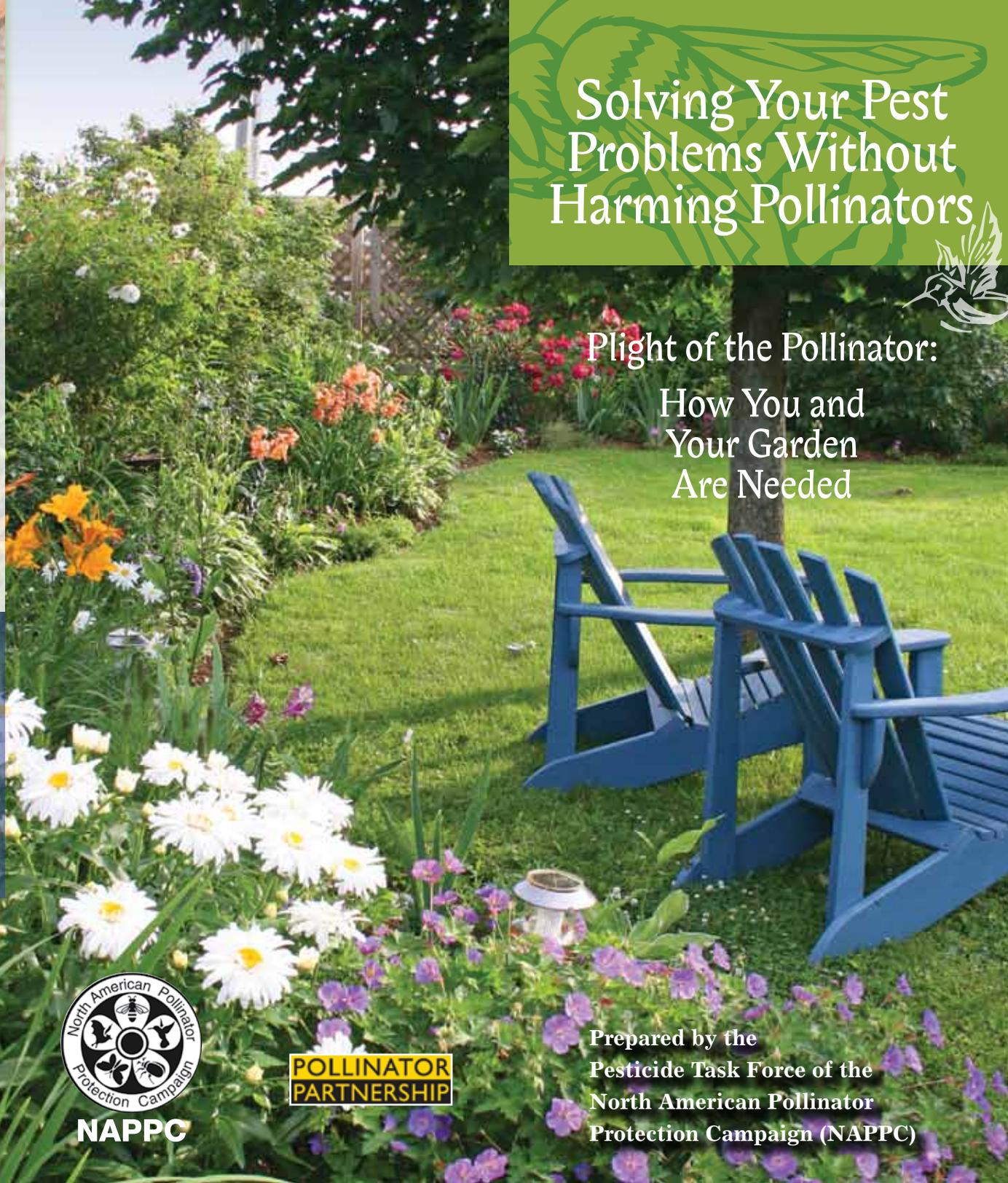
What is a pesticide?

A pesticide is a substance used to control unwanted plants, insect pests, rodents, or plant diseases. Pesticides include herbicides, insecticides, rodenticides, and fungicides.

Of the pesticides, we believe insecticides cause the greatest challenge to pollinators.

Using proper application practices when applying any pesticide is very important in keeping pollinators (and people) safe.

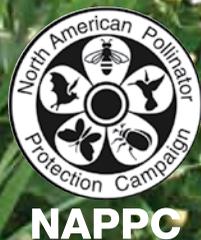
This brochure was produced by the Pesticide Task Force of the North American Pollinator Protection Campaign (NAPPC) with members from American and Canadian universities, bee keepers, industry, and government agencies. NAPPC is a collaborative body of over 140 organizations that work for the protection of pollinators across Mexico, Canada, and the United States. Feedback is welcome. For more information please consult www.pollinator.org or contact info@pollinator.org or call 415-362-1137.



Plight of the Pollinator: How You and Your Garden Are Needed

What are pollinators and why should you care?

- ☘ Pollinators are bees, butterflies, hummingbirds and other animals which feed from flowers, transferring pollen in the process.
- ☘ Nearly 80% of all flowering plants need the assistance of pollinators to transfer pollen within flowers in order to produce seeds, fruits, and vegetables.
- ☘ Approximately one out of every three bites of food you eat depends on the work of a pollinating animal.
- ☘ Pollination also produces seeds and fruits that feed birds and other wildlife.
- ☘ Many blooming plants depend on pollinators for survival, and globally many pollinators are showing disturbing signs of decline from a variety of causes.
- ☘ When you use pesticides you could unintentionally harm pollinators and other beneficial insects. Your careful actions can prevent harming pollinators.



Prepared by the
Pesticide Task Force of the
North American Pollinator
Protection Campaign (NAPPC)

Photo Kim Davis & Mike Stangeland



Pollinator-Friendly Pest Control Strategies for Your Lawn and Garden

Use Integrated Pest Management (IPM) around the home.

☞ Where possible, **avoid pest problems in the first place** by burying infested plant residues, removing pest habitat, and planting disease and pest-resistant plant varieties.

☞ **Carefully diagnose your pest problem**, and, before you apply a pesticide, make sure the pest population has reached a level where control is necessary.

☞ **Carefully evaluate your pest control options**, and use a combination of pest control techniques if appropriate – these may include beneficial insects, manual removal, traps, a pesticide, etc.

☞ **Plant native flowering plant species** to support pollinators, choosing species that are naturally resistant to insect pests.

☞ Many native pollinators such as **bumble bees live in natural areas and also play an essential role in pollination**. Be especially careful when trying to control pests in or near these areas. All butterflies start life as caterpillars, feeding on plants. Learn what type of insect is eating your plants before you inadvertently kill butterflies and other beautiful and beneficial insects.

If you choose to use a pesticide:

☞ Read and follow ALL label directions carefully – use the proper rate (not more or less) at the right time for the correct target pests, and avoid re-applying unnecessarily.

☞ Pay close attention to the Environmental Hazards statement and all pollinator information on the label to determine if special precautions must be taken to protect pollinators.

☞ The label will tell you if the pesticide should not be used on prebloom or blooming plants, and if the pesticide should only be used when bees and other pollinators are not actively foraging (for example, just before dark). Remember that “prebloom or blooming plants” includes ALL plants - garden crops, ornamentals, weeds, native species, etc. Some labels will indicate if application must be delayed until the blooms and pollinators are gone. If in doubt, do not spray.

☞ Dispose of unused pesticides properly. (see earth911.com for disposal sites).

☞ If you handle your pest issues by using pest control professionals, discuss solving your pest problems without harming pollinators.

☞ If you have questions contact your local extension office (<http://www.csrees.usda.gov/Extension/>), conservation district (<http://www.nacdnet.org/about/districts/directory/>) or visit www.pollinator.org/LandscapePests.htm where you can get help.



Photo Greg Lavity

Application tips:

Avoid Drift and Runoff

☞ Keep the pesticide on the pest problem: don't spray when it is windy to ensure the pesticide doesn't drift into unintended areas; don't spray when rain is in the forecast to ensure the pesticide doesn't wash off your yard or driveway into streams or storm drains; and spray only the pest-infested area, avoiding hard surfaces such as sidewalks or your driveway.

Avoid Spraying Pollinators

☞ If the pesticide label contains a caution to avoid “actively visiting” bees, apply before dawn or near sunset.

Avoid Subsequent Pollinator Damage

☞ If the pesticide label contains a caution to avoid “visiting” bees, do not apply the pesticide on blooming flowers. Pesticides with this caution last longer than 8 hours.



Photo Greg Lavity