

STOP PESTering me!

*How to keep **unwelcome plants, animals and other living things** out of homes and backyards **while protecting the environment.***

by Mary Roy

Insects, weeds, mice and mold.

Most of us prefer that these not be part of our homes, yards and gardens. We react to them as pests to get rid of quickly. A fresh understanding of how to manage these living things in and around our homes can improve pest management and help shed traditional pest perceptions.

The United States Environmental Protection Agency (EPA) generally defines *pest* as any undesirable insect, rodent, nematode (roundworm), fungus or weed. However, these aren't pests in every residential situation. Homeowners decide when living things become pests that need to be controlled, and how to control them.

Know your pest. To make an informed decision of how and when to manage a pest, the first step is to identify the specific pest involved. If you need assistance with identification, consult internet resources and local cooperative extension services.

It is also important to learn why the pest is thriving in the home, yard or garden. Observe where the pest appears, how often, and in what numbers. Look for clues about features that attract and support infestation, such as available shelter, food and water. These clues point to effective pest control methods, define the area in need of management, and identify sources of nourishment and shelter that you can eliminate.

Is pest management needed? After identifying your pest, decide whether it needs to be managed. Does it pose a health threat? Does it cause property damage or economic loss? What is your family's tolerance level for the pest?

Management is not intended to fully eliminate pests, because the creatures and vegetation are usually not new, but part of the surrounding environment. Instead, management is intended to achieve an acceptable level of pest presence. It's good to remember that doing nothing is an

option if the pest is just an occasional nuisance. For example, a wasp nest in a corner of the yard not frequented by people needn't be disturbed.

Cast a web of management methods. If the pest needs to be controlled, review all management options. Control methods can be used alone or in combination. It may be effective to use a mix of non-chemical methods, rather than opting for pesticides as a quick solution. The primary types of pest management methods include:

Cultural — changes in habits or sanitation to reduce features that attract pests

Physical — structural changes and mechanical barriers to block or deter pests

Biological — organisms used as natural enemies

Chemical — synthetic or natural substances, including pesticides

Use Integrated Pest Management (IPM). IPM is an approach which

puts all of the control methods in one toolbox. With IPM, the homeowner considers all reasonable measures, but prefers those with the least impact on human health, the environment, and non-target organisms. The focus is on long-term prevention and suppression, as opposed to quick fixes that don't address the root of the problem.

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Choose least-toxic methods. When pest control is needed, it is important to assess the management options. Choose methods that will meet your needs with lowest toxicity to family, pets and other non-target organisms. Pesticides and other chemicals should be used only after you have tried non-chemical and

least-toxic measures and found them to be inadequate.

Prevention: First line of defense. Managing pests starts with preventing infestation. Without prevention, insects and rodents can find shelter in homes and grounds and enjoy dining on food left behind. Stronger management methods may be needed *after* infestation

has already occurred. Home and property maintenance is a primary preventive measure, which includes many cultural and physical controls.

Homeowners can use cultural and physical measures hand-in-hand, to deter new infestations and reduce existing pest populations. These steps can be taken indoors and out.

Indoors: Block pest entryways through structural changes and mechanical exclusion, such as: caulking cracks, repairing screens, weather-stripping doors, repairing water leaks, and storing food in closed containers. Use careful sanitation (e.g., vacuum, sweep, wash) to eliminate clutter and food sources, which attract and support pests. Sticky or mechanical traps are used indoors and out to control insects and small rodents.

Outdoors: To reduce disease and insects on lawns and plants, choose foliage and grass species suited to your soil conditions and climate. Use fencing and plant guards around foliage to deter rodents and other small mammals. Cut down on weeds by using mulch, setting your mower blade high, and regularly weeding by hand. Remove food, water and

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hiding places on your property, especially near the house. Trim foliage and woody shrubs away from the house, particularly in areas prone to dampness.

Biological Controls: These include beneficial organisms that are natural “enemies” of other species. Predators, parasitoids (e.g. wasps), pathogens (e.g. fungi), and weed feeders (e.g. beneficial insects) can reduce pest populations. For example, the New York State insect, the ladybird beetle (also called the ladybug), is a predator. It eats aphids and other insects.

You can get more information

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and practical tips on using cultural, physical, and biological controls by viewing Cornell Cooperative Extension websites and other internet resources.

Pesticides: The method of last resort. If non-chemical means of pest control have not worked and you decide to use pesticides, choose those that are least-toxic. Then you must apply them properly to minimize exposure to people, non-target organisms, and the environment.

In general, pesticides are substances intended to destroy and repel insects, rodents, weeds, fungi and certain other forms of plant and animal life. Pesticides can pose risks to people, non-target organisms and the environment depending upon toxicity and exposure. Children in particular can be at greater risk when exposed, because of physical and behavioral factors. Compared to adults, children have more permeable skin, higher metabolisms and are more likely to place hands and objects in their mouths.

Certain words on the labels of many pesticides indicate their level

of toxicity. EPA advises you to look for the following words when reading a pesticide label:

Labels that say *caution* represent the least toxic category and the products range in toxicity from relatively non-toxic to slightly toxic. *Warning* indicates the product is moderately toxic. *Danger—Poison* appears on very toxic products rarely used in a home; ingesting just a few drops to one teaspoonful would kill a person.

In contrast to synthetic pesticides, biopesticides are derived from natural materials such as animals, plants, bacteria and minerals. EPA

usually considers them less toxic than conventional pesticides.

Should I apply pesticides myself or hire a professional? If you have determined that the pest problem is severe enough to warrant using a pesticide, you have to decide whether to apply the pesticide yourself, or hire a certified applicator.

If you decide to apply a pesticide yourself, you are required by law to:

Check for neighbor notification laws: Find out whether your county has a pesticide neighbor notification ordinance or local law. If it does, any person applying those pesticides (homeowner or certified applicator) must meet certain requirements, which may include posting notification markers and providing written notice to neighbors. Contact your county offices for more information and see the New York State Department of Environmental Conservation (DEC) website.

Use DEC registered products: Under state law, pesticide products must be registered by DEC before they can be used by anyone in the state. A searchable database of

RESOURCES:

Pest management resources are available online, in books, and from organizations, like cooperative extensions.

A wide variety of information, from pest management brochures to lists of registered pesticide businesses and more, is available on DEC’s website www.dec.ny.gov under “pesticides.” For information on disposal of pesticide containers or unused pesticides, look under “household hazardous waste.” Cornell Cooperative Extension publishes *Pest Management Around the Home* which is available at:

<http://ipmguidelines.org/Home/>

The New York State Product, Ingredient and Manufacturer System (PIMS) is available at: <http://magritte.psur.cornell.edu/pims/>

For EPA’s list of minimum risk pesticides, go to http://www.epa.gov/oppbppd1/biopesticides/regtools/25b_list.htm

http://www.epa.gov/oppmsd1/PR_Notices/pr2000-6.pdf.

EPA’s website also has a wealth of other pest management information.

<http://www.dec.ny.gov/chemical/8531.html>



products registered in New York State, the Pesticide Product, Ingredient and Manufacturer System, also includes labels for all state-approved pesticides.

Follow product label directions: Under state and federal law, anyone using pesticides must do so according to directions on the product label. Before buying a pesticide, make sure the pest you wish to manage is listed on the label as a targeted pest. Read the label for important use and toxicity information.

Store and dispose of pesticides properly: Store pesticides in the original labeled container, secured out of reach of children and pets. Follow label directions and regulatory requirements for disposal of unused pesticides and empty containers.

If you decide you would rather use a certified pesticide applicator, use the following state requirements checklist to decide which one to hire:

- The applicator company must have DEC business registration and certificate of insurance.
- The person applying pesticides must have a DEC pesticide certification identification card.
- The applicator, prior to applying pesticides (indoors or out), must supply you with a written, digital or electronic copy of label information on the pesticide to be used, so you can read and attend to the warning and hazard information, and take precautions to avoid

potential impacts to family and pets.

- Prior to applying lawn care pesticides, the business or applicator must supply a contract for your signature, detailing services to be provided, including pesticides to be used, approximate dates and costs of services, and other items.

Remember to monitor the effectiveness of any management method used by yourself or a certified applicator. Check whether the pest is still present and, if it is, to what degree. This evaluation is part of preventing a pest increase or recurrence.

Most people have home pest problems at one time or another. Check with family, friends and neighbors for tips on how they have handled pests. And remember to use the least toxic, effective method, to protect your family, non-target organisms, and the environment!

Mary Roy works on public outreach and regulation development in DEC's Bureau of Pesticides Management.

You don't need to use dangerous chemicals to keep your lawn this green and healthy.

