



FACT SHEET 7.2

PESTICIDE USE AND WATER QUALITY

Hobby farmers are encouraged to implement an Integrated Pest Management (IPM) approach to help control pests. If it is determined that a pesticide is warranted to control a pest population, disease or weed that cannot be managed through prevention, mechanical control, or other non-chemical IPM methods, there are several safety steps that should be taken to protect your hobby farm and nearby surface waters.

DID YOU KNOW?

A pesticide is a substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest. Pesticides can include:

- Herbicides
- Insecticides
- Larvicides
- Rodenticides
- Fungicides
- Disinfectants
- Repellents
- Natural/biological agents

PESTICIDES ARE AVAILABLE IN MANY FORMS INCLUDING LIQUID CONCENTRATES, READY-TO-USE FORMULATIONS, GRANULES/PELLETS, BAITS AND DUSTS/WETTABLE POWDERS.

Any of these products can reach nearby surface water sources through water and wind movement. Contamination of nearby waterbodies can occur when:

- Too much pesticide is applied
- Broadcast methods are used to apply pesticides
- Pesticide is applied before heavy rains or during windy conditions
- Pesticide is leaked or spilled onto a surface then carried off with stormwater runoff
- Heavy irrigation causing runoff takes place too soon after an application
- Pesticide storage or discarded pesticide containers are exposed to precipitation



CAUTION!

Even organic pesticide products can be harmful if applied improperly. Always follow the label instructions for both organic and non-organic products and start with the lowest toxicity product first.



REGULATORY CHECK

It is illegal to apply more than the labeled application rate of a pesticide. Also, check with your local Conservation Commission prior to applying pesticides within 100-feet of wetlands and water resources and within 200-feet of perennial (flowing most of the year) rivers and streams. Finally, remember to check with your city or town before applying pesticides or herbicides within a public right-of-way.

WHEN USING PESTICIDES, CONSIDER THE FOLLOWING:

Step 1 - Choose Carefully

Select a product that is labeled for your pest and location. A product cannot be legally used unless both your treatment area and pest are mentioned on the label.

Step 2 - Get Knowledgeable Advice

Contact your local or state cooperative extension to help determine appropriate pesticide use and application practices.

Step 3 - What's Your Signal Word?

Federal regulation requires that a signal word be prominently printed on the label of most pesticide products. Signal words are based on exposure effects if eaten, absorbed through the skin, inhaled or comes into contact with eyes and skin. Signal words include:

- **CAUTION** – slightly toxic
- **WARNING** – moderately toxic
- **DANGER/POISON** – highly toxic

Step 4 - How Much Do You Really Need

Read the label to determine how much product you are really purchasing. Concentrates may come in small containers but can make a lot of product. Read the label before you purchase – it will tell you how much of the product to apply and how to apply it. Buying in bulk may be economical but not if you consider the hassle of storing and disposing of the leftover product. Remember that more is not better. Applying more than the labeled application rate is not only illegal, but can be a health risk to yourself and your family in addition to risking damage to your plants, livestock, pets, and nearby water resources.



WATER QUALITY BENEFIT

Minimizing the use of pesticides can help prevent them from reaching nearby surface water through stormwater runoff or accidental spills.

HELPFUL LINKS

www.ag.umass.edu/greenhouse-floriculture/greenhouse-best-management-practices-bmp-manual/pesticides-groundwater
www.npic.orst.edu/ingred/products.html

