

What about the new studies on the internet that say herbicides are more harmful than previously thought?

- Many studies on the internet were not done according to accepted scientific standards. They often use methods that are unrealistic—such as injecting concentrated levels of an herbicide directly into a cell. These studies do not translate to real-world herbicide use.

What about inert ingredients and adjuvants? I heard they could be toxic.

- All inert ingredients and adjuvants must be approved by the EPA. The EPA maintains a list of approved ingredients. In addition, in Washington, all adjuvants must be registered by the state Department of Agriculture.
- Adjuvants include many familiar products such as soaps and vegetable oils. Adjuvants are used to help the herbicide work better, including sticking to the plant leaf, increasing droplet size to reduce drift and improving other properties.

What about mixtures of herbicides? Are they more toxic?

- Many modern herbicides are designed to control only a few plant species. If the applicator needs to control several different weed species at one time, mixtures can be more effective than two or more separate applications of herbicide. Each product in the mixture must be registered individually for that purpose.
- Remember, when used according to the label, herbicides have been proven to have almost no toxicity for people or animals, even when used in combination. This is because herbicides are designed to affect biological processes that occur only in plants. Animals and people do not have the same processes.

What about bees? Are herbicides toxic to them?

- According to the National Stakeholders Conference on Honey Bee Health, headed by the EPA and USDA, the greatest threat to bee health is the *Varroa mite*, not pesticides.
- Herbicides are essentially non-toxic to bees, humans, or animals. They work by inhibiting systems that exist in plants but do not exist in animals.
- Some claim that herbicides reduce forage for bees. In Washington, there are millions of acres of diverse forage for bees, even after herbicides are used to manage roadsides and control weeds.
- Herbicides must go through rigorous testing before they are approved for use—including determining pollinator safety. Labels include precautions to protect bees as needed. Always read and follow the label when using any type of pesticide.



Washington Friends of Farms & Forests
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Weed Control

Answers to Common Questions



Questions and Answers about Weed Control

Why do weeds need to be controlled? I don't mind them.

- Most of the plants we call weeds are not native to this area. They were introduced and their presence alters our native habitats. Some spread aggressively, choking out native plants and destroying aquatic and terrestrial habitats. Some are poisonous to livestock, pets and people. Others compete with crops or trees and limit production. Along roads, rail lines and utility corridors, they create a fire hazard, limit visibility and impede drainage.
- **'Noxious weed'** is the legal term for an invasive, non-native plant that threatens agricultural crops, local ecosystems or fish and wildlife habitat.
- Washington State law requires all property owners, whether in residential, commercial, or rural areas, to control certain noxious weeds on their property. For many, this could be a difficult or financially unfeasible task without herbicides.
- Learn more at the Washington State Noxious Weed Control Board website: <http://www.nwcb.wa.gov>

Why is roadside vegetation/weed management important?

- Roadside vegetation needs to be controlled for safety. Vegetation obscures signs and intersections. It prevents water from draining off and shades the road so frost lingers in the winter. Pooling water also degrades the pavement faster and increases the long term cost of road maintenance.
- Deer and other animals are drawn closer to roadways by the food or cover that roadside vegetation provides, increasing the likelihood of collisions which endanger drivers and animals.
- Weeds often spread from roadsides into fields, forests and other areas where they must be controlled.

Why can't weeds just be mowed or cut?

- In some cases, they can, but mowing does not remove roots and most weeds will grow back. Mowing is slow, expensive and must be repeated throughout the growing season.
- Mowing can spread seeds and vegetative parts that can sprout, making the infestation worse.
- The negative environmental effects of mowing with diesel tractors and gas-powered trimmers can be much greater than targeted spraying with herbicides.
- Mowers can throw rocks or other debris into the lane of travel which, if hit by passing vehicles, can cause windshield or vehicle damage or injure motorists or bicycle riders.
- Mowing can be used before or after herbicide applications to improve control of certain weed species. This use of mowing coupled with herbicides is an example of integrated weed management, which is the use of multiple strategies to more effectively control weeds.

Why can't weeds just be pulled?

- While pulling weeds by hand can be helpful on many sites, it is typically not practical along roadsides or in many other locations.
- It is unsafe to have workers pull weeds on roadsides. Work safety requirements include flaggers and lane closures. Not only is this expensive, it is also inconvenient for drivers. Weeds must be hauled away and disposed of.
- It can be very difficult to get the entire root out by pulling. If some of the root is left in the ground, most weeds will simply grow back. If the weed is not pulled before going to seed, the infestation will spread.
- Herbicides are often the most effective way to manage large patches of unwanted vegetation. In many situations once an herbicide treatment gets the problem under control, additional treatments may not be needed for several years, especially when used in concert with reseeding or replanting with desirable vegetation. This is another example of integrated weed management.

Are herbicides safe?

- All herbicides are registered and regulated by the EPA (Environmental Protection Agency.) Testing is rigorous and comprehensive. Directions are written for each product to protect people, fish, animals and the environment.
- Commercial applicators are required to pass a test and get a license. If the licensed applicator does not follow the rules, he can be fined, lose his license and be barred from using pesticides in the future.
- There are no documented cases of injury or illness from herbicide exposure when the product was used according to the label.

Will herbicides harm my pets or the environment?

- Herbicides are designed to work on plants, not animals or humans. When mixed with water and applied to weeds, most herbicides are practically non-toxic to humans, fish and animals.
- Commercial applicators use many of the same herbicides available at home and garden stores. A license is required when someone applies pesticides to property other than their own.
- Many herbicides are less toxic than common household products such as salt, vinegar, coffee, medications and cleaning products.

What if an herbicide gets into the water?

- Labels are written to restrict use near water if needed. Some herbicides are formulated *specifically* for use in water to control aquatic weeds without causing harm to fish or invertebrates.

Photos for this brochure are from the Washington State Noxious Weed Control Board
<http://www.nwcb.wa.gov/>