

Weed Control Around the Home Grounds

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NOTE: This publication is directed primarily to homeowners and is intended to be a companion publication to Extension Fact Sheet FS119 "Weed Control in Home Lawns".

Many homeowners are familiar with the task of controlling weeds such as dandelion and crabgrass in their lawns. However, weeds can also become a nuisance in other areas around the home grounds such as landscape planting beds, woodlots, ponds, brick patios, and driveways.

Biology of Weeds

To effectively deal with weeds in the landscape it is important to understand a bit about the biology of weeds and their life cycles.

Weeds are identified as "plants growing where they are not wanted" and are classified by life cycle.

Annual Weeds

Annual weeds grow for one season and survive by producing seeds which will germinate the following year. Winter annuals such as chickweed and henbit germinate in the fall and produce seeds the following spring. Summer annual weeds such as crabgrass begin to germinate in the spring as soil temperatures rise and produce seed in late-summer/fall prior to the onset of a killing frost.

Annual weeds tend to produce large number of seeds. The average is around 25,000 per plant but some may produce up to 250,000. So, even if only a small number are viable there are still enough to insure that weeds will be a problem not only the following year but for several years to come. This is due to a survival trait all weeds possess called seed dormancy. When an annual weed produces seed not all seeds will germinate the following year. Some will germi-

nate in the second year, some in the third year and so on. Some weed seeds may lie dormant for up to 5 to 10 years before germinating. This makes the prevention of weed seed production very important. Try to prevent the germination of annual weeds with the proper use of herbicides or prevent them from becoming well established by early cultivation, hoeing, or hand-pulling.

Biennial Weeds

Biennial weeds germinate and generally grow in a rosette for 1 year. During this time they will also develop a large taproot. The following year these weeds will flower and produce seeds. Some examples of biennial weeds are wild carrot (also referred to as Queen Anne's lace) and curly dock. Biennial weeds should be removed by cultivation, hand-pulling, or mowing in the first year of growth to prevent seed production the following year.

Perennial Weeds

Perennial weeds live for more than 2 years. Examples of perennial weeds include quackgrass, Canada thistle, dandelion, and yellow nutsedge. They not only reproduce by



Yellow Nutsedge



seeds but also possess vegetative reproductive parts. These include rhizomes (underground stems), stolons (aboveground reproductive stems), bulbs, tubers, nutlets, and taproots. These vegetative reproductive parts store food and over-winter to send up new plants the following year. If the top growth of these plants are removed by clipping or hand-pulling the underground parts will generate new plants that season. Continuous removal of the top growth of perennials will force the plant to deplete its root reserves and eventually kill it. However, control of these plants is best achieved by treating the foliage with a non-selective, translocated herbicide such as glyphosate (Roundup) that will kill the underground portions.

Landscape Planting Beds

Keeping landscape planting beds free of weeds by cultivating or hand-pulling is a laborious and time consuming process. As ornamental plantings spread most annual weeds should eventually be shaded out and excluded from the planting. However, weed control within the first few years of establishment may be required. Due to the long term nature of many ornamental plantings perennial weeds may also become problematic. Therefore, it is critical that homeowners take steps to control perennial weeds in the landscape planting bed prior to establishment. Cultivation of the planting bed prior to planting will help control annual weeds but will do little for control of perennial weeds. These weeds are best controlled with the application of a non-selective, translocated herbicide such as glyphosate. Perennial weeds are best controlled with glyphosate in the late summer/early fall. Following installation of the ornamental planting there are several tools homeowners can use to control weeds. These tools include mulches, landscape fabrics, and herbicides.

Mulches

Organic (tree bark or plant hulls) and inorganic (crushed rock) mulches are available. Mulches suppress annual weeds by excluding light, which is required for weed seed germination. To effectively suppress weeds mulches should be about 4 inches thick and replenished periodically. If organic mulches are applied too thick or begin to decompose they stay wet between rains and allow weed seeds to germinate on top of the mulch. Used alone mulches will rarely provide 100% control of annual weeds and will not control perennial weeds.

Landscape Fabrics

Landscape fabrics are useful tools for weed control in long-term ornamental plantings such as woody ornamental beds, trees, and shrubs. They should not be used in areas planted to ground covers which are expected to spread. Landscape fabrics are recommended instead of black plastic for weed control because water and gases can move through the porous fabrics. The most critical factor in maintaining long-term weed control is to keep landscape fabrics covered with a shallow layer of mulch (1 to 2 inches) so they are not degraded by sunlight. If exposed to sunlight landscape fabrics can quickly degrade and become ineffective within a year.

Herbicides

Several preemergence and postemergence herbicides can be safely used in ornamental planting beds. The preemergence herbicide most commonly used by homeowners is trifluralin (Preen, etc.). Preemergence herbicides are applied after planting but before weeds germinate. Preemergence herbicides will not control weeds that have already emerged. The postemergence herbicide most commonly used by homeowners is fluazifop (Grass be gone). This herbicide will control annual and perennial grass weeds and can be directly sprayed on ornamental plants. Glyphosate can also be safely used in ornamental planting beds as long as the spray solution does not contact the foliage or bark of ornamental species. In some cases it may be best to use a sponge to apply the glyphosate solution to avoid contact with desired ornamental species.

NOTE: Always read and follow herbicide directions carefully. Do not use herbicides for controlling broadleaf weeds in turf such as dandelion in or near ornamental planting beds. If weeds are a persistent problem in landscape planting beds homeowners may wish to consult with a professional landscape contractor.

Wood Lots

Many people move into new homes with recently cleared woods and discover later that weeds such as poison ivy, brambles, and other vines and brush species are infesting areas around the home grounds.

There are several herbicides that can be utilized to clean up these problems. For woody species such as poison ivy and honeysuckle, as well as more tender plants such as brambles and Japanese bamboo, glyphosate herbicide is

suggested. Apply in the late spring after leaves have fully opened or in late summer/early fall prior to leaf drop. Glyphosate will kill desired plants if sprayed on their foliage. If poison ivy is growing in and among desired plants such as a hedge, pull the poison ivy away from the hedge (do not pull the poison ivy out of the ground), lay on the ground, and then spray the leaves with glyphosate. Place several layers of newspaper under the poison ivy to prevent injury to any desired grasses. Allow the treated poison ivy to remain attached to the soil for 5 to 7 days so the glyphosate can translocate into the root system. On small infestations the glyphosate solution can be brushed or sponged onto individual leaves. Be sure to treat as many leaves as possible.



Poison Ivy

When poison ivy is growing up trees, cut the vines at head height and allow the upper portion to die. Treat the lower portion with a herbicide specific for poison ivy (commonly available at a home improvement store or garden center) after the new leaves are fully expanded. In 10 days remove growth.

Free standing brush can be removed in several ways. The foliage can be treated with a herbicide specific for brush control (these herbicides generally contain the active ingredients 2,4-D or triclopyr) in the summer or the brush can be cut leaving a 12-inch stump. Immediately after cutting, treat the stump with a full strength glyphosate solution or a herbicide specific for brush control. For maximum effectiveness perform this operation in the fall and if a brush herbicide is used apply in fuel oil or kerosene.

Brick Patios, Sidewalks, and Driveways

Weeds growing in the cracks of these areas are unsightly and tend to disturb the bricks and sidewalks. Do not apply long-term weed control (materials used for brush, poison ivy, or total vegetation control) compounds to these areas. There are usually roots of desired plants under them which could absorb the herbicide and cause damage. Also, if rain occurs, it can wash the herbicide off the bricks and concentrate it, perhaps killing the grass. We suggest you apply a preemergence crabgrass herbicide in granular form to the area, brush it into the cracks, and sprinkle lightly with water. If the herbicide washes off it will not harm the grass.

If weeds are present treat with a non-selective herbicide containing glyphosate (Roundup), diquat (Reward, Real Kill Liquid Edger, K-Gro Fence And Walk Edger or Ortho Diquat), diquat + fluazifop (Shoot-Out, Spectracide Grass and Weed Killer, Real Kill Grass and Weed Killer), pelargonic acid (Safer Super Fast Weed and Grass Killer). A commercial applicator may use glufosinate-ammonium (Finale). Apply these materials directly on the weeds growing in the cracks. Do not treat the entire area.

Caution: Do not walk on areas treated with these herbicides until the spray dries. When still wet the herbicide may be picked up on footwear and carried into adjoining areas causing injury to desired plants.

Total Vegetation Control

This type of weed control is seldom needed around home grounds but there may be some cases (around buildings, storage areas, driveways, or fence rows) where no plant growth is wanted. There are herbicides available that will kill existing vegetation and prevent further weed growth for periods up to a year. Some of these herbicides contain imazapyr (Arsenal) oxyfluorfen+ imazapyr (Ground Clear Ortho Triox), or prometon (Pramitol).

Caution: Use these herbicides with the utmost care! If a mistake is made it will be apparent for a long time. If rain occurs soon after application the herbicide may move with the water killing any desired vegetation. As these compounds are washed into the soil they may contact the roots of desired trees and shrubs causing severe injury. Homeowners may be well advised to use the non-residual herbicides listed under the section of brick patios, sidewalks, and driveways in these areas.

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