Spring Weed Control Strategies for Homeowners

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Mow at the recommended height

Higher is generally better

Fertilize to favor the roots

N Fertility Programs of the Past

Seasonal Growth

Heavy
Light
N Fertility Programs of the Past

Heavy nitrogen in spring, light in fall
- Excessive clippings
- Excessive thatch development
- Reduced heat and drought tolerance because carbohydrate reserves were burned up during spring growth flush

High Cut Turf N Fertility Program

- March-April: 0-½ lb N / 1000ft²
- May-June: ¾-1 lb N / 1000ft²
- August: ½-¾ lb N / 1000ft²
- September: 1 lb N / 1000ft²
- Late October: 1 - 1 ¼ lb N / 1000ft²

Prevent crabgrass if you have had it in the past

Preemergence Herbicide Applied Here

Smooth Crabgrass
Can I use a crabgrass preventer if I am seeding my lawn?

No. If possible, you should wait and seed in August.

Fall Seeding of Cool Season Turf

August 15 – September 15

• Turfgrasses are more competitive
• Warm season weeds (e.g. crabgrass) are at the end of their life cycle
• Germinating grasses require warm soil temperatures, but are intolerant of summer heat

Turf Tolerances to Preemergence Herbicides

<table>
<thead>
<tr>
<th>Products</th>
<th>Barnyard Grass</th>
<th>Goosegrass</th>
<th>Yellow Foxtail</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,4-D</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Haloxyfop</td>
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<td>Halosulfuron</td>
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<td>Propachlor</td>
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<td>Atrazine</td>
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</tbody>
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1. Brand name/registrant is for one example product only and field may vary among brands or formulations of the same active ingredient. Always consult the label of the product you are using for specific uses to applicability.
Remove broadleaf weeds from the lawn

- Dandelion
- White clover
- Black Medic
- Oxalis
- Clover
- Blackseed plantain
- Buckhorn plantain

Perennial Broadleaf Weed Control

Postemergence herbicides in the fall
- More effective than spring application
- Better CHO translocation
- Control not always immediately apparent
- Landscape and garden species are less susceptible to drift injury
- Winter annuals are also controlled
Products

2,4-D
2,4-DP
MCPA
CPP

Dicamba
Clopyralid
Fluroxypyr
Quinclorac
Triclopyr
Carfentrazone
Sulfentrazone
Pyrflufen
Florasulam
Flumioxazin
Halauxifen

Gordon’s Amine 400
Scotts Step 2, Turf Builder Weed & Feed, Gordon’s Weed & Feed
Gordon’s Trimec, Preen Lawn Broadleaf Weed Control, Spectracide Weed Stop For Lawns Plus Crabgrass Preventer, Ortho Weed B Gon, BioAdvanced Weed Killer for Lawns, Ace Lawn Weed Killer Concentrate, Ferti-lome Weed-Out Broadleaf Weed Control

*Products mentioned are for example only and do not constitute an endorsement to the exclusion of other products that may be similar.

Broadleaf Herbicide Formulations

Granular
• More acceptance among consumers
• Often formulated with fertilizers
• Most broadleaf herbicides are soil-active, root absorbed

Liquid
• Far more effective
• Better coating, more penetration

Creeping charlie

Canada thistle

Wild violet
Products

- 2,4-D
- 2,4-DP
- MCPA
- MCPP
- Dicamba
- Clopyralid
- Fluroxypyr
- Quinclorac
- Triclopyr
- Carfentrazone
- Sulfentrazone
- Pyrflufen
- Florasulam
- Flumioxazin
- Halauxifen

Bonide Chickweed, Clover and Oxalis Killer
Quincept, BioAdvanced Lawn Weed & Crabgrass Killer, Ortho Weed B Gon plus Crabgrass Control, Bonide Duraturf Crabgrass Plus
Ortho Weed B Gon Chickweed, Clover & Oxalis Killer
Bonide Weed Beater Plus
Spectracide Weed Stop 2
Q4 Plus, Spectracide Weed Stop

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Prostrate knotweed

Prostrate spurge

Annual Broadleaf Weed Control

Spring Annuals such as knotweed
Summer Annuals such as spurge
Winter Annuals such as henbit
All germinate at different times of year and come back each year from seed. Control before they set seed.
Winter annual broadleaf weed control

Preemergence herbicide in September
Is better than:
Postemergence in November
Is better than:
Post emergence in April

Familiarize yourself with natural/organic products if interested in using them

What is Organic?
Natural
Non-toxic
Low impact
Minimum risk

Natural / Organic Weed Control Products

Non-selective
• Various plant oils
• Horticultural Vinegar
• Herbicidal Soaps
• Pelargonic acid

Selective
• Corn Gluten Meal
• Chelated iron
• A.D.I.O.S.
• Halo

Corn Gluten Meal

Byproduct of wet milling process of corn

10% nitrogen by weight
Kentucky Bluegrass Germination 21 Days after Seeding

Untreated CGM 20 LBS/M CGM 40 LBS/M

Corn Gluten Meal

Bioactive Dipeptides

Less effective in year 1

Crabgrass control >85% has been observed in 2nd and subsequent years of use

How to Use Corn Gluten Meal

Spring application for crabgrass

Fall application for broadleaf weeds

20 lbs product per 1000 square feet
- 10% N by weight
- 2 lbs N per 1000 square feet

Chelated Iron

Selective because iron is more toxic to broadleaf plants than to grasses

Can discolor turf in warm weather

Several products available
Some Chelated Iron Containing Products

- Fiesta
- Iron X
- Natria

All are 26.52% Iron HEDTA
Typical rate 25.2 fl oz / 1000 ft² and 240 GPA

Fiesta

Dandelion
White clover
Applied: Sept 20, Oct 11
4% Solution
5 gal per 1000 ft²

What are these strange new weeds in my lawn?
**Lesser Celandine**

*Ranunculus ficaria*

- Introduced as ornamental
- Native to Europe
- AKA Fig buttercup, pilewort

Spring ephemeral

Invasive

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**Lesser Celandine Control**

- Manual
  - Be sure to remove bulbs
- Non-Selective
  - Glyphosate
  - Temperature should be above 50 degrees
- Selective control in Turf
  - Choose a herbicide with at least 2 of the following: MCPA, triclopyr, dicamba

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Remove perennial grasses from the lawn after they have greened up
Perennial Grasses
For most, no selective control options available
Preemergence herbicides are not an option
Must use glyphosate and then reestablish turf

How do I control weeds in my landscape beds?
**Design for Cultural Weed Control**

Plant canopies should close at maturity

When possible, select ground covers for which labelled herbicides are available

Hardscaping/mulch for high traffic areas

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**Cultural Weed Control**

Install quality, weed-free soils, plants and mulches

Regularly clean equipment

Scouting / early detection may allow for mechanical control of certain weeds

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**Weed Control in Ornamental Beds**

Identify weeds you are trying to control

- Affects herbicide choice

Know the life cycle of the weed

- Affects application timing

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**Weed Control in Ornamental Beds**

- Annual Grass
- Annual Broadleaf
- Sedges
- Perennial Grass
- Perennial Broadleaf

Select Control
Generally Easier

Select Control
More Difficult

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**Perennial Broadleaves**

- Curly Dock
- Canada Thistle
Perennial Broadleaf Control

No preemergence options
Postemergence control may be easier in late fall compared to spring
- Weeds are more susceptible
- Ornamentals may be less susceptible

Very few selective herbicide options

Clopyralid (e.g. Lontrel)

Can be used over the top of about 50 trees, shrubs, ornamental grasses and ground covers on label
Must be used as directed spray for all others
Do not apply near shallow rooted trees or shrubs
Do not seed for 3 weeks
Do not rotate susceptible ornamentals for 10 months

Control of woody vines and invasives

Triclopyr can be sprayed or painted onto freshly cut stumps to prevent re-sprouting

Glyphosate

Winter Annual Broadleaves
Winter Annual Broadleaves

- Common Groundsel
- Purple Deadnettle

Cool Season Annual Broadleaves

- Knotweed
- Mallow
- Black Medic

Warm Season Annual Broadleaves

- Purslane
- Pigweed

Warm Season Annual Broadleaves

- Spurge
- Oxalis

Landscape Bed Preemergence Herbicides

Apply prior to weed germination
Requires adequate rainfall or irrigation to "activate"
Do not expect season-long control

Always review label for information about sensitive plants
Preemergence Herbicides

Dichlobenil
Dimethenamid-p
Dithiopyr
Isoxaben
Metolachlor
Oxadiazon
Simazine

Oryzalin
Pendimethalin
Prodiamine
Trifluralin
Oxyfluorfen
Flumioxazin
Indaziflam

One of safest products for annual beds

Trifluralin + Isoxaben (e.g. Preen extended control)

Not for use in annual beds

Mulches

May help control weeds from seed
- Not effective against perennials

Mulches may be:
- Used alone
- Placed on top of geotextiles
- Used in conjunction with herbicides

Non-Selective Herbicides

Contact
- Diquat (e.g. Reward)
- Pelargonic acid (e.g. Scythe)
- Glufosinate-ammonium (e.g. Finale)

Systemic
- Glyphosate (e.g. Roundup)

Must not come into contact with ornamental plants
Ornamental Bed Weed Control

Read the label
• Are the ornamentals tolerant?
• Are the weeds controlled by product?
• Are you applying at the right time?
• Consider if residual will cause effect on subsequent annual plantings (if applicable)

Ornamental Bed Weed Control

Properly calibrate spray equipment
• Over application may damage ornamentals and waste money
• Under application may result in poor weed control