
Missoula County

Integrated Plant Management

Fact Sheet No. 8

Managing Lawn Weeds

Whether or not weeds successfully invade turf areas depends on how lawns are managed and on the adaptability and competitiveness of the weeds.

Common Lawn Weed Characteristics

Weeds come in two forms: **Annual** and **Perennial**. Annuals live only one year. Perennials return from year to year.

Annuals reproduce seed which germinate, grow, flower, and set new seed all in one season (e.g., chickweed and black medic.) Perennials live more than one season. Some perennials germinate, grow, and over winter as a perennial taproot (e.g., dandelion.) The second year these perennials re-grow from the large taproot. Others germinate from seed and then reproduce from rhizomes (underground stems) broken off of the parent plant (e.g., quack grass.)

Weeds adapt themselves to lawns in many ways. The most important way is *rooting depth*. Most bluegrasses and fescue grass roots extend only 6 inches to 8 inches into the soil. Weeds compete by extending their roots into the soil deeply, sometimes as deep as 25 feet (see Figure 1.)

Combating Lawn Weeds

First you need to find out what type of weeds you have. Are they annuals or are they perennials? How deep do their roots extend? Do they reproduce by seed or by underground stem?

Then look at the *cultural* practices affecting the health of the lawn such as the following 6 points:

1). **GRASS VARIETY**. Is a drought-tolerant variety needed? A shade-tolerant variety? See our handout on Low Maintenance Lawn Alternatives for further information.

2). **WATERING**. Is the lawn being watered every day for 20 minutes, whether needed or not? This common practice encourages shallow grass root growth. To encourage deeper root growth which better competes with weeds, water *less frequently but for longer periods*. This approach will also grow stronger grass leaves to shade out weed seeds that are trying to germinate. Too little water can also encourage weeds, especially if the grass is a water-loving variety.

3). **MOWING**. In addition to encouraging deeper grass roots, allow the lawn to remain

greater than two inches in height before mowing. This will help shade out germinating weed seeds and give your grass the leaf area it needs to grow healthy root systems. Longer lawns require less water too.

NOTE: Don't forget that leaving lawn clippings on your lawn can help to improve soil and will encourage strong grass roots.

4). **FERTILIZING.** Over and under-fed lawns do not compete well with weeds. Lawns receiving too much fertilizer may grow too lush and become susceptible to disease, causing bare patches. These bare patches are then often invaded by weeds. Lawns receiving too little fertilizer are susceptible to broad leaf weed invasion such as clover and black medic. Lawns with low pH often have moss in the wet, shady areas.

To improve the lawn's root environment, spread it with ¼ inch to ½ inch of compost. Follow that by fertilizing with a 1:1:1 (N-K-P) ratio fertilizer in the spring and in the fall. Fertilize with a 2:1:1 or 3:1:1 (N-P-K) ratio in the late spring or early summer.

5). **AERATING.** Weed competitive, healthy grass comes from healthy roots. To encourage healthy roots, aerate the lawn one to three times per year. Compacted soil may invite weeds, such as dandelions, into your lawn.

6). **CHEMICAL TREATMENT.** Some weeds may invade even healthy lawns. If they do, identify them **before** you develop their management strategy. Avoid "blanket" treatments if possible. Use spot treatments instead.

Try **least-toxic** options when using chemicals. Soap-based products will burn back many annual weeds but are ineffective on deep rooted annual and second-year perennial weeds. Short residual, *non-selective* Finale (glufosinate

ammonium) and Roundup (glyphosate) are good choices for spot treating deep-rooted weeds.

CAUTION: They also kill lawn grass.

Other *selective* herbicides are available but read the label carefully to see if they will be effective on your weed(s). Evaluate your chemical treatments for effectiveness and to see if they fit in with your lawn health approach.

How long should a lawn be watered?

A lawn should be watered as long as needed to let the water penetrate 6 to 8 inches into the lawn.

Do NOT water again until the top inch is dried out. Use a shovel after watering to see

how long it takes for water to penetrate 6 inches into your soil.

