

Story & Photography By Douglas A. Spilker, Ph.D.

f you keep your eyes open, you can uncover clues as to why certain things happen. Keeping track of your weed problems can do just that. The end of the year is a good time to reflect on the problems you encountered and make plans to fix them in the coming year.

The presence of certain lawn weeds can be an indicator of what is going on down below. Weeds are opportunistic, especially in areas where soil conditions are not conducive to the monoculture of turf-type grasses. Most lawns in the Midwest are cool-season grasses like Kentucky bluegrass, perennial ryegrass or tall fescue. These types of grasses flourish best with plenty of moisture, balanced nutrition and well-drained soils. Dense, well-maintained lawns discourage weed encroachment because weed seeds cannot get started between the grass plants. So what happens if ideal conditions for grass growing are not met? Weeds fill in the gaps.

Broadleaf Banes

Clover is a common malady that creeps in when soil nutrition is low, so if you are combating clover, reflect on your fertilization program. Increasing fertility will not necessarily get rid of the clover, but the combination of improving soil fertility and a treatment or two of broadleaf herbicide will set your lawn on a course of being clover free.

Dandelions are a different story. The source of the seeds may not just be from your negligent neighbor, but potentially from "yards" or even miles away. The fluffy seeds seem to be able to sprout and grab a foothold even in well maintained lawns. The trick to dandelions is to be ever vigilant and control them with spot treatments as they come up. Broadcast applications of herbicides are rarely needed. Using a weed digger for individual plants may provide immediate gratification, but just be ready to do it again in a week or two.





Soggy Soils

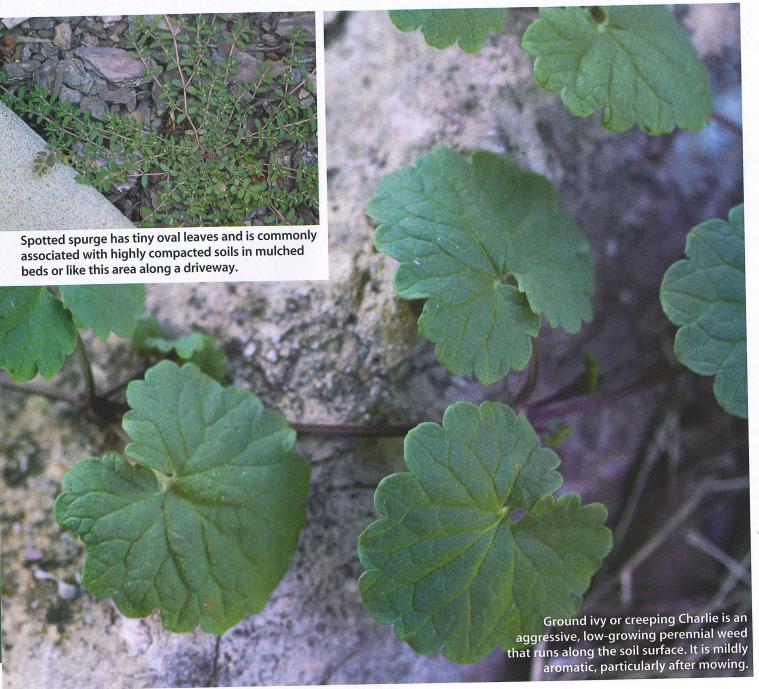
Other weeds like yellow and purple nutsedge (nutgrass) tend to infest poorly drained areas, especially where water stands after rain or irrigation. Nutsedge infestations can be quite maddening. It seems to sprout up from nowhere. The presence of nutsedge, in addition to its lighter green color, produces a ragged appearance because it grows faster than the grass and disrupts the uniform appearance of a manicured lawn. In late June and July, nutlets (tubers) form on tips of rhizomes. Most nutsedge plants come from these nutlets that may have been lying dormant for years in the soil or from nutlets brought in by contaminated sod. Very little nutsedge is produced from seed. It can take several years to get rid of this weed, as new plants are continuously produced from the nutlets left in the soil. If the nutsedge problem is minimal, improving drainage and simple hand weeding may be effective, but herbicide treatments are required for larger infestations.



Above: Nutsedge has triangular stems and leaves with a strong midrib. Top left: Since dandelion seeds are windblown, they can show up even in the most well maintained lawns. Bottom left: Although some homeowners do not mind white clover, it tends to grow in patches and will crowd out the grass in those areas.

Give It a Whirl!

Some weeds are almost easier to identify by feel, rather than by appearance. Certain families of plants, especially two difficult-to-control weeds, have distinctive stem characteristics that make them easy to identify. Roll the plant stem between your fingers. Does it feel triangular or square? Yellow and purple nutsedge weeds, also called nutgrass, are not grasses at all but in the sedge family (*Cyperaceae*) and have distinctive triangular stems. On the other hand, creeping Charlie (aka ground ivy) has a square-like stem and is a member of the mint family (*Lamiaceae*) like peppermint (*Mentha x piperita*), bee balm (*Monarda* spp.) and catnip (*Nepeta cataria*).



The difficult-to-control ground ivy (aka creeping Charlie) is characterized by its coin-shaped leaves with scalloped edges and square stems. This perennial weed spreads by aboveground runners, which root at each node and can quickly take over large areas. A combination of shade, wet soil and poor fertility favors ground ivy over the turf. Correcting these conditions will allow the turf to compete better with the ground ivy. Herbicide applications will not be effective unless the growing conditions that initially encouraged the infestation are improved. Combining good maintenance practices with multiple herbicide applications provides the best hope for combating this lawn invader.

Hard Knocks

Some weeds are indicators of poor soil structure, that is, how the soil particles fit together. Do you have some areas where you cannot get grass to grow, but prostrate knotweed or spurge does just fine? These weeds do very well in areas of

poorly draining, compacted soil. The first step is to dig down and figure out what might be wrong. Is the soil leftover clay from digging the home's foundation? Is it a high-traffic area compacted by a path to the garden or play area? Consider aerification (coring) to reduce compaction, or improve soil structure by adding organic matter before reseeding. Although herbicides can be used, relieving soil compaction is the key to improving turf vigor and limiting future populations of prostrate knotweed and spotted spurge.

As with many turfgrass problems, the long-term approach to managing weeds begins with a critical evaluation of the growing conditions for the desirable turf. The best defense against common weeds is a thick, healthy lawn. Remember to stop, look and listen. The weeds may be telling you their sad story!

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