

# Convert Your Home Lawn to a New Variety

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**T**he rate at which breeders are commercializing new cultivars of virtually all species means a relatively new lawn can become out-dated in a short time. Newer cultivars tend to have better disease resistance and stress tolerance and often are more tolerant of mowing abuses. As a result, lawn customers, both commercial and residential, often wish to improve their turf by converting to new and improved varieties.

Most communities have older neighborhoods in which most lawns contain a mix of species that have evolved over several years to create a unique combination of grasses. These represent, for the most part, the result of survival of the fittest. Many of these older lawns need a conversion to improved cultivars for a host of reasons: thatchiness, weed invasion, disease or insect problems. In the cool-season turfgrass areas, older lawns tend to evolve to Kentucky bluegrass with some fine fescues when nitrogen fertility has been adequate. When nitrogen fertility has been low or absent, these lawns tend to become predominantly fine fescues. In many cases, a significant thatch problem exists, particularly when lime applications have not occurred and pH is below 6.3.

In newer lawns - those established since the early 1980s-landscape contractors, unless otherwise specified, typically used mixes of cool-season grasses that included significant amounts of turf-type perennial ryegrasses (enough so that the established stand is dominated by this species). In the past 5 to 8 years, breeders have made significant improvements in perennial-ryegrass cultivars, especially with improved mowability and increased resistance to red thread, rust and snow mold. Therefore, in most communities in the cool, humid re-

gions of the country, only lawns that have been established in the past 5 years or so consist of the best cultivars that the industry has to offer. For this reason, ample opportunity exists to improve older (and even not so old) lawns through various methods of conversion. After all, sound cultural practices can only bring turf quality up to the genetic potential inherent in the cultivars. Consider increasing that genetic potential by incorporating cultivars with improved characteristics.

## Choose The Correct Strategy

How do you go about the conversion process? To make the correct choice, you must carefully inspect the existing turf to assess whether it needs a complete conversion or whether merely shifting the turf population to predominantly improved cultivars will suffice. In older lawns, certain cultivars and species often develop particular niches where they thrive (for example, moist, shaded locations, heavy-wear areas or areas with unique soil conditions). In such circumstances it would be a mistake to alter the turf in any way. Time and nature have chosen the appropriate grasses for those areas. On other sites, however, it makes good sense to completely start over by removing the existing turf and establishing improved cultivars.

## Complete Conversion

Clearly, it's easiest to accomplish a conversion when you need to remove the entire turf stand. To do so, spray the entire lawn with a non-selective herbicide such as Roundup Pro (from Monsanto) or Finale (from AgrEvo). It is important to wait a couple of weeks for any regrowth to occur before attempting to remove the dead turf. If regrowth does occur, re-spray and wait an additional week or so. When

bidding such work, be sure to include the necessary time for spraying and the possible need to re-spray. If you fail to re-spray, the older, inferior cultivars persist via rhizomes and stolons and re-establish themselves, mingling with the newly seeded improved cultivars. Consequently, the intended complete conversion doesn't happen.

If a thatch problem exists, physically remove the dead turf and thatch, and prepare a new seed bed before seeding and growing-in the improved cultivars. If you achieve a total kill and no thatch problem exists, the dead "stubble" serves as an excellent mulch into which you can establish the new cultivars. To do this, core cultivate several times, verticut the site and then apply the seed by slit and broadcast seeding, using half the seeding rate for each method.

## Partial Conversion

On lawns where a reasonable amount of desirable turf is present and you only want to establish a "presence" of new cultivars, using a plant growth regulator (PGR) such as Novartis' Primo or PBI/Gordon's Embark can be effective. The PGR is a necessary because interseeding is only successful when the existing turf is compressed so it won't compete with the over seeded cultivars for a time.

Follow this order of conversion:

1. *Mow (scalp with rotary mower.*
2. *Core cultivate (3-4 times) and verticut to at least 0.5 inch into the soil.*
3. *Collect clippings, thatch and debris.*
4. *Apply starter fertilizer.*
5. *Use a combination of slit and drop seeding of the chosen cultivars.*
6. *Roll the site and then irrigate.*
7. *Treat with PGR two days later at the label rate recommended.*

The combination of scalping and applying PGR suppresses the existing turf for at least 6 weeks, providing ample opportunity for the overseeded cultivars to germinate and establish before the surviving turf begins to re-grow. The new cultivars will eventually dominate the population and only the fittest of the original turf will remain. These remaining "fit" grass plants lend genetic diversity to the final turf stand.