

CONSIDER NEW TURF CULTIVARS FOR POST-DROUGHT RENOVATION

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All new cultivars have favorable basic characteristics, or the expense of bringing them to market would not have been undertaken. Typically it requires several years to test a cultivar and build up foundation seed supplies; then at least two more years before a field planting yields economical quantities of seed for market. Therefore, almost any proprietary cultivar will inevitably be better-looking than common grass, will be well screened for tolerance against at least the more commonplace diseases, will be low-growing and thus denser at normal mowing heights than is common grass, and will show satisfactory vigor and adaptability.

Beyond this, other characteristics may be more individualized—aggressiveness, tolerance to extreme acidity or alkalinity, response to treatments (such as phytotoxicity from pesticides), compatibility, thatch formation (related to aggressiveness), tolerance to insects, mowing neatness, wearability, richness of color, resistance to smog, and so on. But remember that cultivar ratings reflect conditions of the moment, in a particular area, under a certain regimen. Disease virulence is largely a matter of coincidence. And different experts have differing likes and expectations! Thus it is not surprising that a cultivar is seldom top choice everywhere, or even at a given location two years running. Were I to characterize even just the Variety Review Board cultivars here, a dreary recitation would be needed spilling over many pages, noting qualifications and exceptions. It is just not possible to give an

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unqualified endorsement; yet, any cultivar is capable of first-rate performance if influences are reasonably favorable.

However, a few generalizations seem valid that may offer guidance for choosing lawnseed:

1. Often discoveries from nature, having been exposed to the rigors of natural selection, adapt a bit better to neglect than do highly bred choices. On the VRB list, domestic adventives such as Arboretum, Glade, Merit, Nugget, Plush, and Vantage lean this way, as do certain cultivars introduced from Europe (e.g. Baron, Fylking). Park and Kenblue represent common-type naturalized bluegrass populations from Minnesota and Kentucky respectively, but beware of unspeci-

fied common bluegrass since it is often high-yielding Newport, an older cultivar without many fine-turf qualities.

2. No turfgrass, even a fescue, is at its best without some fertilization. A feeding rate of two pounds elemental nitrogen per thousand square feet annually as part of a complete fertilizer should be roughly the ecological breaking point on most soils for stimulating grass dominance over competing forbs (weeds). Complete neglect risks thin, weedy turf, no matter the cultivars chosen.

3. Vigor and density are energy-saving attributes in that they enable the turfgrass to compete well, crowd weeds, and depend less on pesticides. Most domestic hybrids such as Adelphi, America, Bonnieblue, and Majestic are of this ilk, as is Enmundi from Europe. They have generally been proven out under fertilization; they may or may not do well underfertilized. Chosen for outstanding performance on golf courses or athletic fields, which are generally reasonably well tended, are such notables as Merion, Ram I, and Touchdown, and Birka and Sydsport from Europe. The more vigorous of these cultivars may thatch a bit if earthworms and microorganisms cannot cope with heavy inputs of vegetation under your environmental circumstances. Incidentally, lawn clippings increase thatch very little; they consist of succulent tissue quickly decomposed. However, fast-growing turfgrasses are likely to require mowing a bit more frequently, an energy-related factor to be considered.

4. Differences between the perennial ryegrass cultivars are not so apparent, and most of the cultivars can be utilized interchangeably. Citation, Diplomat, Omega, and Yorktown II seem to be relatively nonaggressive, but the ryegrass component in turfseed mixtures is nonetheless best held to about 20% lest slower-starting bluegrass be repressed. Almost all of the recent ryegrass releases have tolerable winter hardiness, Manhattan and NK-200 being acknowledged for suitability even in more northerly regions. Pennfine and Regal get good marks for hot weather durability. Derby rates highly, and like Blazer and Fiesta enjoys quite a winterseeding usage on dormant bermuda in the South.

5. Chewings fescue cultivars are very handsome in favorable locations, but often become irregularly clumpy in hot-humid weather. They may disperse less comfortably in a bluegrass matrix than does ryegrass. Fine fescues are a poor-soil grass, often colonizing dry areas under trees receiving little or no fertilization, and enduring

Continues on page 20

well-drained sandy soil outcrops. Cultivar differences are less marked than with bluegrasses.

6. Slight differences are noted among bluegrass cultivars in ability to hold up with little or no summer watering, Arboretum being a case in point. Under eastern conditions, Bonnieblue, Enmundi, Glade, Nugget, Plush, and Ram I have all endured greater acidity than most; on alkaline soils in Colorado, Adelphi, Baron, Fylking, Ram I, and Sydsport have remained non-chlorotic. Differences of such nature are not great, however, and are often overshadowed by maintenance and climatic variables. Normally, east of the Mississippi irrigation is not necessary for turfgrass survival, although, (obviously) during dry spells a lawn will look prettier if watered. In the arid Southwest, however, turf is not possible at all without irrigation. Generally fescues are considered more tolerant of drought than bluegrasses, bluegrasses more drought-tolerant than ryegrasses. Some summers in Ohio have reversed these expectations, with perennial ryegrasses staying green and attractive longest without any watering.

Drought damage offers the opportunity to introduce newer, pedigreed cultivars.

It is apparent that one can't prescribe with confidence the "best" turfgrass species, or cultivars of that species, since so much depends upon user preferences, location, level of care, and so on. Fescues are perhaps best adapted to minimal fertilization, but much depends upon native fertility of the soil and other influences. Most bluegrasses and ryegrasses get along quite well at modest levels of fertility, Merion and other vigorous cultivars being more demanding. Weeding requirements are usually reduced by fertilization, since nitrogen encourages grass at the expense of broadleaf weeds. Vigorous grass, encouraged by autumn feeding, provides a good base, but additional weed clean-up will be needed occasionally (as with selective phenoxy herbicides such as 2,4-D, or crabgrass preventers).

Pest control measures for insects and especially diseases are most effectively handled by establishing natural balances and by planting resistant cultivars. A typical homeowner is not equipped to diagnose lawn disease, nor to apply proper fungicides accurately. Fortunately, most modern cultivars are remarkably tolerant of disease, especially when several are blended together in the lawn population. Changes of weather or season lend a big assist. Knowledge of

insect resistance is not so far along, although resistance to such things as sod webworm and other pests seems to vary among cultivars. An insecticidal drench may occasionally be necessary if one's lawn becomes severely infested, but minimization of damage can usually be achieved by encouraging predators of the pest insects. This idea has perhaps been most successfully explored in Florida, although the possibilities would seem promising anywhere.

In spite of a homeowner's best efforts, calamities occasionally will occur. Such was the case in 1980, with the extreme weather over much of the eastern half of the nation. From Texas through Missouri to Minnesota record heat and drought wiped out many lawns, as also occurred along the eastern seaboard where, autumn refreshment did not come sufficiently soon to allow repairs in 1980. Yet in Ohio, inordinate rainfall in early August kept soil waterlogged and "drowned out" much vegetation before drought set in through September. Lawns in such areas may call for repair, which offers opportunity to introduce newer, pedigreed cultivars perhaps a bit better suited for lawns than the mixed assortment previously had. It is possible in these days of knock-down chemicals (glyphosate, for example), to free a lawn of remaining unwanted vegetation before seeding. Then scarify the surface mechanically (use powered scarifiers or turf seeders for large areas) before spreading seed and following customary cultural practices. If the timing is questionable and patching imperative, consider the fast-starting perennial ryegrasses; well-seated, they will provide incipient cover with just a few days of warm, moist weather.

Whether or not the United States will continue to direct as much attention toward its lawns as in the past, in the face of mounting national contingencies, remains to be seen. Almost nowhere else in the world has lawn making so flourished. In Europe many houses traditionally have been built flush with the street, eliminating front yards. With a dense population for centuries, little space could be accorded plantings that were decorative only (the backyards are mostly utilized for vegetable gardens and for fruit production). But in the United States, spacious home grounds are still the norm, except, perhaps, in congested metropolitan centers. The cost of land has now increased, however, to a point where new housing often entails small lawns or communal grounds such as those of the condominium.

Yet, it will be a long while before the spacious suburban home is a thing of the past, and the most efficient way to accommodate it to the landscape is with a lawn, hopefully one requiring minimal bother and cost. But, as was noted earlier, no form of vegetation is without care and some prob-

Continues on page 50

lems. In arid regions stone mulches are increasingly tried but do not have the cooling effect and biological fascination of vegetation. Drought-tolerant prairie grasses can sometimes be substituted, requiring somewhat less irrigation than conventional turfgrasses. However, the turf they form is not the carpet-like sward to which most American homes are accustomed.

Because of such factors, and the chore of keep-

The attitude "Let nature take over" is not well thought through. Nothing is more economical than a conventional lawn.

ing a lawn mowed, feelings such as "abandon the law; let nature take over" are sometimes expressed. This approach is not very well thought through. Over most of the country conditions are such that unpleasant, costly surroundings would result for years to come. In humid regions the cycle would normally be: coarse annual weeds, adventive perennials, brush and brambles, and volunteer saplings of impermanent trees. Not for a

hundred years or so would the disturbed landscape return to its natural climax of permanent, high-quality forest. Even then, most landscaping calls for open, airy parkland to extend the vista, provide air circulation and a sense of spaciousness. Nothing has proven more able or economical for meeting these needs than a lawn of turfgrasses conventionally tended.

The lawn need not be a burden. Choosing suitable lawngrass cultivars and according them basic needs is really not a difficult matter. Almost no other special use of vegetation has benefitted so much from the evolution of labor-saving equipment and products that spell convenience in care. If lawn tending turns onerous, it is generally because of poor understanding of lawngrasses and their basic requirements. Often considerable attention is devoted to non-essentials.

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