

COMMENTARY

Highland, colonial bentgrasses have dominated in the UK for ages

By SKIP LYNCH

In a recent *Golf Course News* article, I read with incredulity that the courses of the British Isles have been seeded to Chewings fescue and creeping bentgrass for over a century ["History proves benefits of chewings/fescue/creeping bentgrass combination," *GCN*

Skip Lynch is a technical agronomist for Corvallis, Ore.-based Seed Research of Oregon.

May 1996]. The author writes, "this combination was first made popular in Scotland and England more than 100 years ago."

In fact, the bentgrass components of these fairway mixes have always been predominantly Highland (*Agrostis castellana*) and colonial bentgrasses (*A. capillaris*, or *A. tenuis*). It is not splitting hairs to say that the differences between creeping bentgrass and colonial bentgrass are substantial. Creepers are

stoloniferous; colonials are bunchgrasses. Creepers tend to grow aggressive laterally; colonials tend to grow more upright. Creepers tend to require more water and nitrogen fertility than do the colonials.

I asked Mr. John Hughes, agronomist for British Seed Houses Ltd. to address the issue of creeping bentgrasses in the British Isles. He wrote, "The combination of grasses within the UK golf courses has tradi-

tionally been fescue with Highland or colonial bentgrass." Although there may be some native creeping bentgrasses found on the coastal courses, he went on to write, "Where creeping bent has been used with fescue in the UK and Ireland, it tends to form an irregular sward. The (creeping) bent eventually dominates, leaving patches of fescue — especially in fairways."

Mike Robinson, president of Seed Research of Oregon, has

traveled extensively throughout the UK and collected germplasm from some of the finest courses in England, Scotland and Ireland. "We've made several collection trips to the UK, and only a couple of times have we ever found creeping bentgrasses under fairway conditions."

And what of the new courses that have tried these fine fescue/creeping bentgrass mixes? "They're very patchy. The bentgrass is segregated-out into large patches. Creepers and fine fescues don't make an acceptable playing surface at fairway height in the UK."

It is important to note that the courses of the UK and Ireland manage fairway turf at a much lower monetary and material cost than we do in North America. Still, this does not diminish the quality of the playing surfaces, or the demand for tee times.

The idea of planting fairways with something other than a species monostand of creeping bentgrass, perennial ryegrass, or Kentucky bluegrass is indeed an older concept. In the days before improved varieties, many grasses were sold on the basis of genus collections. For instance, the term "South German Bent" actually meant *Agrostis* sp., including colonials, Highlands, velvets and creepers. Technological advances changed management practices, eventually culling out those species that were not complementary with the management goals, the climate, and the other grasses in the sward.

It was not uncommon for fairways in the U.S. to be planted with fescues, bluegrasses, ryes and bentgrasses 100 years ago. The advantage of mixing these different species was that it provided an extremely broad genetic pool. Eventually, nature would decide which species and genotypes were best suited for the site and use. When combining species of grasses in a mix, it is important to realize the inherent needs of each, and in so doing, allow them to complement each other.

Both the fine fescues and colonial bentgrasses are low-water, low-fertility, upright grasses. The combination of fine fescue and colonial bentgrass at fairway height forms a very fine textured, upright turf that performs best when water and nitrogen fertility are kept to a minimum.

Colonial bentgrasses have been the victim of some very bad press. Colonial varieties in the time of Dr. James Beard's book *Turfgrass: Science and Culture* (Prentice Hall, Inc., 1973) were not as well developed. Dr. Beard writes that colonial bentgrasses have a comparatively slow spring green-up. In fact, colonials are consistently earlier in every NTEP bentgrass fairway/tee tests; significantly earlier than the creeping bentgrasses. He goes on to write that colonial

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GOLF COURSE NEWS

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Lynch comment

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bentgrass "... requires a relatively intense level of culture..." and that they are, "... susceptible to a large number of diseases."

Under high intensity maintenance, colonial bentgrasses are very susceptible to disease. Turn this equation around, and under low intensity maintenance, they are extremely resistant to disease pressure. As a result of Dr. Beard's book, many of us went through turf school thinking that colonials were somehow inferior to creepers. The truth of the matter is, they are neither better or worse: just different.

Today, great improvements are being made. SR 7100, Bardot and Tendenz are a far cry better than their parent material. We have been advocating these fine fescue and colonial bentgrass polystands for years.

Turfgrass trials installed by Tom Cook at Oregon State University in June of 1992 were seeded with 11 such mixes and one plot of perennial ryegrass as a check plot. Some of these mixes also included Kentucky bluegrasses or perennial ryegrasses with the fine fescue/colonial bentgrasses. The plots have received no additional fertility beyond preplant and no pesticide applications whatsoever. They have been mowed at 0.500" with the clippings removed. Through four summers, the combination (90 percent Chewings fescue/10 percent colonial bentgrass) has performed best, followed very closely by those plots that added strong creeping and hard fescues to the polystand.

These plots have remained relatively weed free and have shown very little sign of disease. These combinations of the fine fescues and colonial bents have stayed extremely well integrated and have provided a firm, dense, uniform playing surface. By contrast, those plots with Kentucky bluegrass or perennial ryegrass in the mix have been very prone to Red Thread, Pink Snow Mold and weed invasion, and segregated almost immediately. The perennial ryegrass check plot has shown the worst performance of all under these low input conditions.

We applaud the movement in the golf industry that is trying to maintain the traditional look of the Scottish links courses. We are also encouraged that our industry is making great strides to reduce the chemical, mechanical, and monetary inputs required of golf course maintenance. Mixing fine fescues with colonial bentgrasses is an excellent way of reducing pesticide applications, lowering water use and minimizing fertility requirements.

Although the turfgrass/golf industry has been slow to break from the "conventional wisdom", more and more superintendents are realizing what's new isn't always better, and what's old isn't always bad.

GOLF COURSE NEWS

Musser Foundation names President Dobie and new directors

SHARON CENTER, Ohio — Musser International Turfgrass Foundation has announced its 1996 board of directors.

The Musser Foundation is a non-profit organization dedicated to fostering turfgrass as a learned profession and supporting education and research in turfgrass development and management. The board is composed of turf professionals who volunteer their time and efforts.

This year's board officers are President Frank Dobie of The Sharon Golf Club in Sharon Center, Ohio; First Vice President Dr. Joseph Duich; Second Vice President Tom Burrows of Tom Burrows Turfgrass

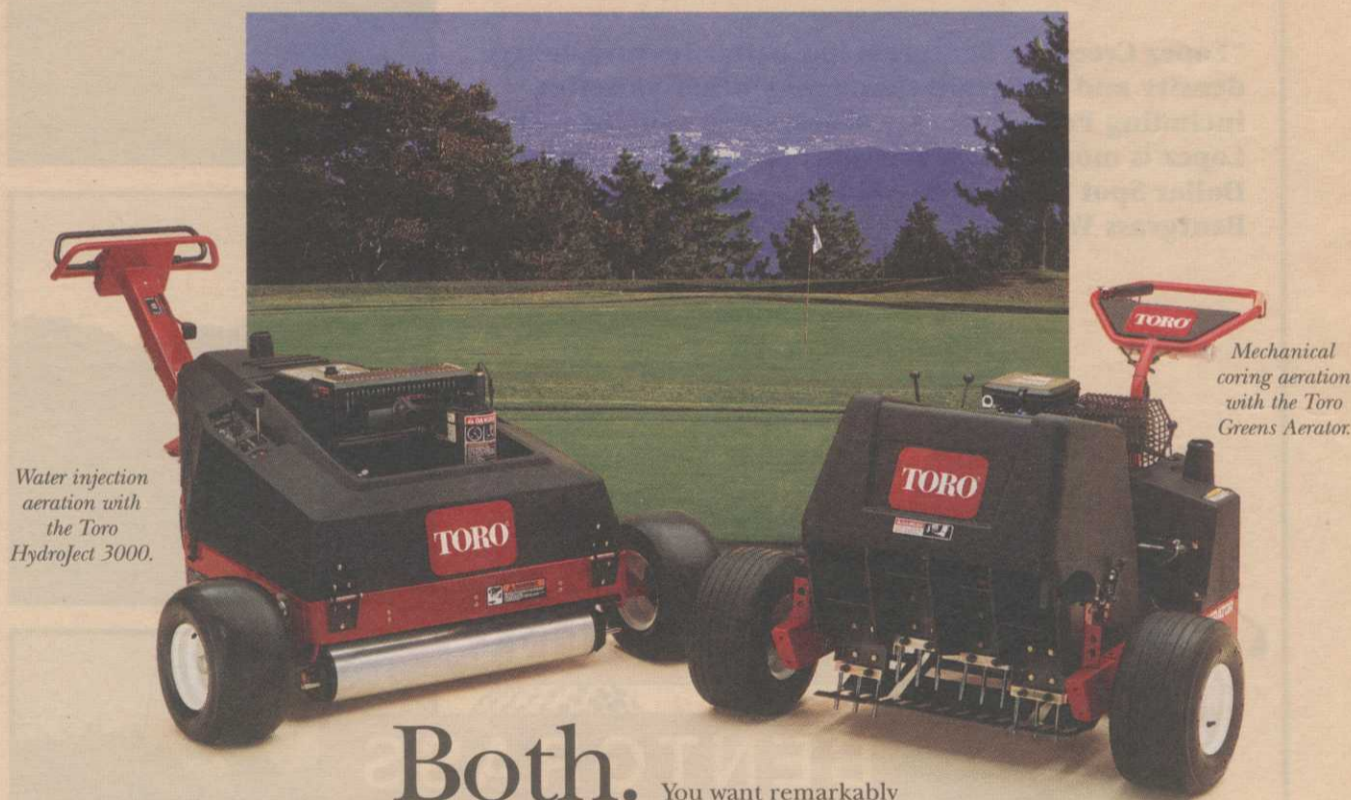
Services in Stuart, Fla.; Treasurer John Spodnik of Westfield Center, Ohio; and Secretary Dudley Smith of Silver Lake Country Club (CC) in Orland Park, Ill.

Elected to the board are Joseph Baidy of Acacia CC in Lyndurst, Ohio; Michael Bavier of Inverness Golf Club in Palatine, Ill.; Dr. James Beard of International Sports Turf Institute in College Station, Texas; Michael Hurdzan of Hurdzan Design Group in Columbus, Ohio; James Loke of Bent Creek Golf Club in Lancaster, Pa.; Jeffrey Markow of Cypress Point Club in Pebble Beach, Calif.; Don Maske of AgrEvo in Parkville, Mo.; Dr. Harry Niemczyk of

Ohio State University; and Dr. Tom Perkins of American Cyanamid Co. in Wayne, N.J.

The remaining board members are Terry Plagman, Penncross Growers Association, Albany, Ore.; Dr. Paul Rieke, Michigan State University; William Rose, Tee-2-Green Inc., Hubbard, Ore.; Dr. Robert Shearman, University of Nebraska; John Souter, Souter of Stirling Ltd. of Scotland; Eberhart Steiniger, Laurel Springs, N.J.; Brent Wadsworth, Wadsworth Golf Construction Co., Plainfield, Ill.; Dr. James Watson, Littleton, Colo.; Norm Whitworth, Whitworth Associates, Oak Grove, Ore.; and Stanley Zontex, U.S. Golf Association, West Chester, Pa.

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