

# Experience Hasn't Justified Mixed Green Hopes

By RALPH R. BOND

**I**N THE past ten years or so there has been a great deal of planting of mixed greens, namely Arlington C-1 with Congressional C-19, also with Collins C-27 mixed in.

We heartily agree to this idea up to a certain point.

There is no question but that the most practical solution is the planting of a mixture of two or more bentgrasses which are not susceptible to the same diseases. Injury to one is compensated for by the green blades of the other, but this is only true for a given number of years.

Let us admit that there never was, and the chances are, there never will be a perfect bent grass for all environments and regions. What then is apparently more logical than to assume that one could mix two, three or even four different strains in the same green and produce a better green?

We thought so too, and six years before anyone else thought of the scheme, or at least before the idea was printed, we planted 18 trial plots of mixed bentgrass stolons of every conceivable mixture of all the better strains known at that time. Some of these plots had two mixtures, some three and some even four. Most of these plots showed up to advantage, at least better than any single-planted plot, up to three, four and five years. After the bentgrasses began to separate and after a few more years the stronger or more aggressive strains took over and in most cases the areas became practically one strain plots.

There is nothing surprising about this.

It is proof of the "survival of the fittest." Ever since the world began this battle has been continually going on, and in every case the strongest of the species won over the weaker. This is true in the sea, the forest, the weeds, the grasses, the insects, the animals, as well as in the human world. No man has ever been able to change this procedure, no one ever will.

In the creeping bentgrass family we do not know of any strains that have identical aggressiveness. Perhaps if we could find two or three of these strains maybe

we could develop a green where the different strains would not occur as definite colonies but would blend uniformly throughout the green.

But how about the roots? Will they intermingle? We have come to the conclusion, but without proof, that there is a war going on under ground amongst the roots. Plants, just like human beings, have antagonisms toward each other.

Our limited observations and our experience would indicate that harmful root interactions may occur between various species of bentgrasses.

We have observed that some strains of creeping bents such as Old Orchard C-52 and Toronto C-15 have fewer weeds, clover and poa annua than most other strains.

We are inclined to the conclusion then that the roots of these two strains excrete secretions that are detrimental to some weeds. If this is true, and we believe it is, why not go a step further to the conclusion that some bentgrass roots do not like other bentgrass roots of another strain and are continually waging a war against each other and separating, which makes the plants above ground separate? We do not know the answer. We wish we did.

We do know that when we plant two or more strains together in the same green that the plants separate. Many of us who remember the old German seeded greens of 25 years ago—there are some still in existence—will attest to this. Those greens were like a "Jacob's Coat", with every conceivable color of green from yellow green, blue green to dark green. We can remember the round circles of patches of all sizes where the more aggressive strains were taking over the weaker strains.

Now the idea of planting the C-1 and C-19, and even the C-27, together in the same green was because these bentgrasses had nearly the same color and would not appear a mosaic turf because of wide variations in color.

As a matter of fact they do not have the same color. The C-19 has possibly



## HARTFORD (CONN.) COUNTRY CLUB BUILDS ANEW

Supt. Donald H. McKay of the Hartford (Conn.) GC, proudly presents the club's new course maintenance quarters which he declares is the most modern, conveniently designed and equipped of any such buildings in New England. The club's extensive rebuilding program also features a new clubhouse which will contain, among other features, a squash court and bowling alleys. Extensive remodeling of the course and installation of a fairway watering system; parking space for 350 cars, and six tennis courts, have been other highlights of the \$750,000 program. The club plans to build an additional 18 holes.

the richest dark green of all bents. The C-1 is a pale bluish green, the C-27 is dark green but not as pronounced as the C-19. As the strains become separated after a few years it becomes very noticeable. At any rate one does not have a single color green. The effect is a mottled colored green. Some people like this; we don't. We like uniformity of color in our greens.

### Protection of Strain Purity

If course superintendents knew of the expense and painstaking care we nurserymen take in producing and continuing a pure, true-to-name strain by hand-picking every seed head while still in the flower stage, leaving our land lay idle a full year between crops while chemicals are destroying every bent root and weed seed, cleaning and moving our shredding machinery to a new location after each strains' cutting, keeping our various strains so widely separated in their own nursery that there is no possible chance for the strains to mix, etc. etc., they would not entertain doubt of our dislike of mixed greens. Sometimes we wonder if we shouldn't have our heads examined when order after order comes in for two strains.

However we can do nothing about it. If our customers want mixed greens that's their business. It's our business, as nurserymen, to supply their wants. We predict the custom will wear out in a few years.

We have stated that mixed greens will separate into colonies of their own strains.

We have checked this dozens of times; at least to our satisfaction.

To give a specific case, we have in mind the greens on the Burlington (Ia.) GC. This course lays between Madison, Wis. and our branch nursery at Farmington, Ia.

At least once a year, sometimes oftener, we had occasion to inspect these greens. We furnished the C-1 and C-19 stolons to plant them about ten years ago. The foundations were perfectly built and tiled. The topsoil had the correct mixture of the right kind of pea gravel, sand, peat and good cornland dirt. The material was mixed outside of the green and hauled on. It was a perfect job.

For the first three years one could not ask for better greens. Any course superintendent would be glad to call them his own. We were indeed proud of them. There was nothing but bentgrass on the greens. No poa annua, no weeds, no clover; just a tight solid mass of fine turf.

In the spring of the fourth year Mrs. Bond, who almost always traveled with me and took notes, and I, walked toward the No. 9 green and observed there was something wrong with the green. From a short distance it looked for all the world like a small field of waving green wheat just heading. The shades were light green, then dark green, then light green, etc.

On coming closer our next thought was that the green had not been mowed for a few days. But upon getting onto the green we noticed that it had been mowed that

very morning. But there it was for the whole world to see, a definite disarrangement of the two strains.

The next season the disunion was more pronounced. C-19 which is the more aggressive, altho neither strain is known for its aggressiveness (this includes the C-27) produced larger areas. On our last visit we could not distinguish any of the Arlington.

From now on Mr. Superintendent will have to treat his greens as he would any other Congressional greens, which isn't too bad as Congressional makes beautiful greens, if properly maintained. He will have to treat it for brownpatch, fertilize it to force growth to lessen clover and poa annua, and at least once a year rake it out or use a Verti-Cut or similar machines.

The strains will disunite much earlier if over-watered. C-1 cannot take excessive watering and will thin out or disappear entirely. This may be the reason that mixed greens in the dry southwest do not detach so readily as in the moist midwest.

Now the thought arises, if the more aggressive strain has any or too many objectionable features, then it seems that we are much worse off than we would have been had we planted something better in the first place.

## Tree Planting Plan Fits Aesthetics and Golf

By VERNE WICKHAM

GOLF course architects and builders have a problem of making the golf course that's an open space in a commercial or residential area a landscaping achievement as well as good golf architecture.

Many golfers who haven't much of an idea about the planting design to control and reward wise shot-direction get keen enjoyment out of the beauty of courses. The genius of the golf architect and landscape artist in making a course look like it is naturally beautiful presents an especially valuable blend of essentials in the case of the thoroughly well-designed course that is bordered by residential or commercial areas.

Trees, flowers and shrubbery added to the broad acres of green grass present a pleasing picture amid the blacktop and cement, brick, plaster and mortar of the city and the addition of color to the picture is rapidly finding favor with golf course planners and engineers as they

scurry to botany books and nursery catalogues to find trees that can supply the needed color.

The mid-west, south and eastern courses blaze with color in the Fall of the year but in California and Florida, where many so-called tropical trees can be used, the trick is to find trees that will supply year round color.

In the planting schedule for the new Eaton Canyon golf course near Sierra Madre, Calif., up against the background of the blue San Gabriel Mountains, officials of the Los Angeles County Department of Parks and Recreation selected a list of trees which when grown promise to supply almost year around color to the sporty nine-hole course. More than 20 varieties were selected in the 700 trees needed.

The area already had some native oaks, sycamores and eucalyptus and to this is being added, much like an artist puts color on a canvas, leaves, blossoms and color.

Several types of all-year green-leaved trees were selected to give contrast and color. The Italian stone pine with its bright green needles is being planted near the Virginia oak with its dark glossy leaves for contrast purposes. The grey green of the Canary Island pine provides the background for the eucalyptus ficifolia (flowered). The flame tree with its showy bright scarlet clusters gets its background compliment from the grey green of the Canary Island pine.

Some of the fairways will be bordered with two rows of trees on staggered lines with the lighter or grey green trees near the fairway borders and the darker, more glossy-leaved trees forming a background. Trees with as near year-around color as possible will be spotted behind the greens with heavy planting back of them to give a good background to the approach shot.

The complete list of trees selected for the Eaton Canyon job follows: Catalina cherry; Golden acacia; Italian Stone pine; Flame tree; Sycamore-London Plane tree; Canary Island pine; Sweet Gum; Chinese Zelkova; Orchid tree; Japanese Privet; Flowering almond; Idaho Pink locust; Virginia oak; magnolia; Coral eucalyptus; Scarlet eucalyptus; Strawberry tree; Redbud, and Arizona cypress.

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