Virginia Polytechnic Institute

Blacksburg, Virginia

Sudy options in science (for those anticipating gra uate work), technical aspects, and business are officed four-year undergraduate students in Virginia Polechnic's turfgrass management program. Under the direction of Drs. R. E. Blaser and R. E. Schmidt, Processor and Assistant Professor of Agronomy, the VP program is conducted within the Department of Agronomy, with the Departments of Plant Pathology and Physiology, and Horticulture cooperating.

Four-year undergraduate and graduate programs are offered, leading to B.S., M.S., and Ph.D. degrees in agronomy with a turf ecology option. Graduate degrees are basically research degrees, and the course of study is selected primarily on student interests.

VPI's turf program was started in the late 1950's, with the first formal course being offered in 1961. There have been about 10 graduates; enrollment now stands at 14. Admission to Virginia Tech. is required for turf study, and students must be high school graduates who have satisfactorily passed college entrance exams.

starting date for 1967's class is Sept. 13. Applicatic is are accepted any time, but to assure favorable consideration, they should be made six to nine months all ad of anticipated attendance date. Tuition, paid by nonresidents, is \$140 per quarter. On-the-Job the sing is included as an undergraduate requirement. lequests for particulars on Virginia Tech's program stuld go to Dr. H. L. Dunton, Head, Department of A onomy.



5440 Northwest Highway — Chicago 30, III.

Seeded Fairways

The Lawn Institute - Dr. Robert W. Schery

Fairways, of course, cannot bear the same budget burdens that do the greens. A green, whether vegetatively planted at considerable expense, or economically with Penncross seed, still requires a high level of maintenance (special mowing, feeding, disease control, dethatching, and so on). A "breed of cat" satisfied by lower maintenance is needed for the fairway, – a grass that stands close mowing, is not so aggressive (thatch-building) as are the creeping bentgrasses, is economical and always available in good supply. The answer for many golf courses seems to be a colonial bentgrass, of which the Highland variety is the most used. Some of the bentgrasses available as seed are given in the list.

Colonial bentgrasses may be utilized in several ways. For irrigated fairways that have turned largely to **Poa annua**, Highland bentgrass can be seeded as "insurance". This was done at Firestone Country Club some years ago, accompanied by vertical mowing of the fairways. Even on Kentucky bluegrass-fine fescue fairways mowed close to accommodate tournament demands, a bolstering with Highland seems to make sense, for providing "body" preferable to that from weeds (which otherwise surely will come when bluegrass is mowed close).

Where the fairway is renovated or newly planted consider a mixture of colonial bentgrass seed with a small percentage of Kentucky bluegrass and fine fescue. In cool weather a bentgrass such as Highland is slow to show (indeed, it may not be strongly evident until the following year). Fine fescue sprouts quickly, yet, unlike aggressive nursegrass, is acceptable in turf. Bluegrass is a little slower than fine fescue but should be included too; it often persists even under short mowing, although not dense enough without bent to provide a good ball lie. At the Lawn Institute we have had excellent results from seeding a combination of these grasses, mowed and managed for the bentgrass.

This looks like a winning combination for the fairways that must be mowed close, especially irrigated ones. Maintenance is not great. Any bentgrass, however, profits from fertilization every month or six weeks during the growing season. A suggested rate might be 1 lb. (actual) nitrogen per thousand square feet each few weeks from late spring into October. This would be 6 or 7 lb. of a good balanced fertilizer such as 16-5-11, or perhaps a 15-5-5 where potassium reserves are known to be adequate.

Seeded Bentgrasses

Astoria — Lighter-colored than Highland, but similar, originally from a very moist climatic area.

- Exetrer A new colonial type selected in Rhode Island, even-textured but not of as good early and late color as Highland at the Lawn Institute.
- Highland The famed "workhorse" bentgrass from a restricted seasonally-drier area in Oregon, dark
 - bluish-green, economical, readily available.
- Holfior a Holland selection of colonial bentgrass said to grow erectly.
- Kingstown A very fine-textured velvet bent selected in Rhode Island, more troublesome to maintain than Highland or Penncross.
- Penncross Prize seeded creeping bentgrass from three vegetatively propagated parent strains; vigorous and disease resistant.
- Seaside An older mixed population of creeping bentgrass from the Oregon coast, not so diseaseresistant as Penncross.