



Here are strips of Northland bent, more than one-foot wide, in poa annua on green at Riverside course in Edmonton, Alberta.



Clarence Wolfram (1) has kept poa annua under control with frequent sodium arsenite treatments. Portion on left is untreated.

### O. J. Noer's Turf Roundup

## Nature Cooperates in 1960 and Superintendents Breathe Easier



Light colored spots on approach to this green were due to iron chlorosis. They were knocked out, as you will note, by spraying with ferrous sulfate — 1½ oz. per 1,000 on a Thursday and 2 oz. the following day.



By and large this has been one of the better grass years on golf courses. The winter was a good one except in parts of Ontario. Even the poa annua came thru well on most of the courses of the Canadian prairie provinces. The summer was a good one except for Oklahoma and the Cincinnati to Kansas City belt. In both places there was a bad spell of unusually wet, humid weather during the fore part of the season. Weather was hot in August so greens maintenance was not easy. Otherwise there were few complaints. Ray Gerber of Glen Oaks in Chicago mentioned that he had fungicided greens only four times, so weather there must have been good. There was enough fungicide sold in 1959 for a couple of normal years, so the industry shouldn't complain.

In western Canada, east of the Rockies, turf on greens is mostly poa. It makes a good putting surface and grows well during the summer. The main drawback is that poa winterkills frequently. Then greens are bad for play until well into June, or even early July. There is no grass until night and day time temperatures become favorable for seed germination and grass growth.

Creeping bent grass got a black eye in the prairies because original plantings were Virginia bent, a notoriously poor strain. Some of the bents under test on the plots supervised by Hugh Knowles

at the University of Alberta, Edmonton, have done well. This is only natural because true-strain Washington has been successful in Winnipeg for many years.

Northland bent, a selection made by J. R. Watson from a green at Northland CC in Duluth has been a notable one. It makes a good playing turf, holds color well and has been quite resistant to snow mold. Strip plantings of Northland in 18 inch rows on the ninth green at Riverside in Edmonton has spread 5 to 6 ins. into the poa within several years. Old Orchard has been another good one. Both of these grasses, along with Congressional (C-19), deserve trial testing in other parts of Canada, and in northern regions of the U.S. where snowmold menaces greens.

#### Winterkill Hits Poa

Winterkill in Ontario followed icing on greens. Poa was hit worst. The better strains of bent fared best. The worst greens were the ones of all poa and where poa was the only grass in big patches scattered over the green. It would seem wise to establish a turf nursery of good bent, kept exactly like a putting green for patching purposes in spring. Some clubs have gone a step further. They have started enough nursery for 3 to 4 greens and plan a re-sodding program. Soil in the nursery has been modified with sand and peat to conform with the final topsoil mixture in the green. The final surface has been prepared carefully to make it firm and absolutely level before seeding or planting stolons. Unless the surface is smooth it is hard to cut sod to a uniform thickness. The nursery will be fertilized and mowed the same as the greens. Then the program calls for re-sodding in late fall of the next year. After removing the sod on the green surface, runoff will be improved, if necessary, by recontouring. The soil will be reworked and additional sand and peat added if needed to create a soil of 60 to 70 per cent sand, 10 to 20 per cent loam, and 20 per cent of a good quality fibrous humus, such as sedge or reed peat. The proportions are by volume.

#### Solves Weed Problem

Soil sterilization before seeding or planting nursery stolons solves the weed problem. Methyl bromide (Dowfume) is preferred by some over Vapam because it is quick and there is no danger of after effects. The need for a tent-like cover of plastic to confine the gas is the chief objection.

Clarence Wolfram of Maple Lane in Detroit has an easier and cheaper way to

sterilize the nursery there. He plants Toronto stolons. The nursery is sprayed 12 times with sodium arsenite. The soil is worked to a depth of 4 ins. after each spraying. The rate for sodium arsenite is  $\frac{1}{2}$  lb. each time making the total 6 lbs. per 1000 sq. ft. Stolons are planted immediately afterwards. Besides killing all weed seeds poa annua control has been perfect, even though the surrounding area is heavily infested with it.

#### Good Reports on Bent

In Oklahoma greens of Cohansen, and the patches of it in other greens came through the bad weather vastly better than Seaside. Bud Elmer of Indian Hills in Kansas City reports success with it there. He warns that clubs should be sure to obtain true to type planting stock from a reliable nursery. The Arlington (C-1) and Congressional (C-19) mixture has done well in the transition belt. The big trouble has been to avoid separation in the green after planting. Some blame poor mixing before planting, and others say there should be an extra bushel of Arlington in the planting mixture. Old Orchard is said to be doing well on the test area at Athens, Ga. CC and in southern California. The tees of Nimissila and the two all Nimissila greens at Firestone CC were excellent for the PGA tournament.

Bent greens in Nashville and the new ones at East Lake in Atlanta have been popular with golfers. Disease was a problem during hot, wet weather, but no more so than in Cincinnati where bent greens have been in use for many years.

There have been complaints of puffiness on some Penncross greens. It was especially noticeable at Derrick CC in Edmonton, yet the two greens of it at Hersey were extremely good and the turf was tight. Riley Heckert seems to know how to handle this grass. He removes the surplus grass in the spring and mows close from then on. Penncross greens at Royal Montreal Club have resisted snow mold very well during the two winters of its existence there. New Penncross greens in Cincinnati were hit badly by disease during the time when there was 10 in. of rain in a period of several weeks. In a nursery at a nearby course the same thing happened to Penncross. The other bents were not affected. But here again the Penncross was young. Pythium was blamed. Caloclor finally stopped the disease and subsequent recovery was good.

Penncross is a step in the right direc-

(Continued on page 82)

# "GALLOPING GOLF"

*The fastest moving golf game off the golf course*

Every roll is a hole of golf. Fast and fun plus all the side action of golf. Great before or after game in locker room or grill. Played at every opportunity both at home and at the course. Attractively packaged with professional type dice cup and five easy to read dice in different colors, along with pad of 25 score sheets and rules of play.

You don't have to take lessons to play "Gallop-ing Golf" . . . you simply roll the five dice at one time and read your shots from tee to pin according to sequence of colors . . . red, white, blue, yellow and green. You'll get 300 yard drives . . . sand traps . . . birdies . . . one putts . . . dub shots . . . and all the others.

**Only \$4.50 with usual Pro discount.**

*The Christmas gift any golfer will be happy to receive, and a real game for family play.*

**GALLOPING GAMES, INC.**

540 N. Lake Shore Dr., Chicago 11, Ill.



they're easing themselves out of a job. When the blowup finally comes, you can bet that no club official in his right mind is going to take 'I was afraid to ask for it', as an excuse. That's the silliest attitude a supt. can have."

I've been trying to follow that advice since I've been at River Forest.

## **Nature Cooperates in 1960**

*(Continued from page 66A)*

tion. A good performing creeping bent which can be produced from seed is badly needed. It would be cheap even at \$10.00 a lb. based on the 1 lb. seeding rate recommended for Penncross, as compared to 4 to 5 dollars per bu. for stolons with a planting rate of 7 to 10 bu. per 1000 sq. ft. Seeding is quicker and easier than stolon planting.

Iron chlorosis is on the increase. It has been especially bad on poa. This has been true on fairways as well as greens. Supts. in the Chicago area sprayed poa infested fairways periodically and believe its use has been extremely helpful.

Poa annua was doing badly on some greens on one course in Montreal in Aug. Roots were almost non-existent. Iron chlorosis seemed like the cause but symptoms were not clear cut. It might have

been lead arsenate toxicity. There was leaf spot but disease seemed to be secondary — the result of weakened grass. Two small spots of Velvet bent showed the characteristic chrome yellow color associated with iron chlorosis. Ferrous sulfate was used at 1½ oz. per 1000 sq. ft. with 20 gals. of water per green on a Thursday afternoon. On Friday results were not striking but signs indicated slight improvement. Ferrous sulfate was used again that afternoon at 2 ounces per 1000 sq. ft. By Monday recovery was startling. Even the worst spots where it looked like the grass was gone showed new signs of life. Improvement was remarkable.

Complaints are being made by golfers about failure of new greens to hold the ball. Higher percentages of necessary fibrous organic matter may be needed during the first several years to offset the higher sand content of the surface soil. As the humus undergoes decay, grass will develop the sole of turf needed to provide the necessary slight cushion.

The kind of sand used in topdressing mixtures seems important. Uniformly fine sand is not the answer. A good, sharp sand is better. There are several instances where the switch has been beneficial.