C-15 DECLINE & RESULTING REGRASSING - UPDATE AT THE VILLAGE LINKS

The Village Links of Glen Ellyn is a 27 hole golf complex comprised of a championship 18 hole course and a full length 9 hole course. The golf courses are part of recreational properties owned and operated by the Village of Glen Ellyn since 1965.

At the time of the initial outbreak of the bacterial wilt disease later known as "C-15 Decline", the Village Links had 240,000 square feet of C-15 putting green turf covering 27 golf hole greens and 1 practice green. The disease began its obvious encroachment at the Links in June of 1980 and continued to worsen sporadically throughout that season. Conventional fungicides were applied in an attempt to retard progression, but results were negligible.

In 1981, several varieties of chemicals were acquired and applied experimentally. Oxytetracycline was used and had some positive results, but certainly did not affect the desired control. This particular material also appeared to increase susceptibility to heavy traffic causing excessive wear and additional turf loss. The Scotts product, which contains the same active ingredient as Acti-Dione RZ (PCNB), was also applied and showed some promise. Again, however, negative side effects, such as application difficulties during high temperatures, limited its use and control had to be considered marginal.

Following a particularly severe disease attack on June 16, 1981, it was felt that more concrete steps should be employed. Since a complete cure for the devastation was uncertain and the Village Links is totally dependent upon daily fee revenue, it was determined that a rapid solution was essential. After discussing available alternatives, Links management staff decided to follow a course which was felt to offer the most obvious benefit to customers who were accustomed to playing quality greens. During mid-July, a program was established involving the following major steps:

A) Close the 18 hole championship course in late summer, strip the diseased C-15 turf, fumigate and reseed to Penncross Creeping Bentgrass in late August and early September. It was felt that this method would eliminate the possibility of dealing with a lingering problem, would place the course back in service for the following year and would afford a positive pay back.

B) Keep the 9 hole course open to play and continually overseed greens with Penncross beginning in September 1981. We did not want to turn our customers away completely, nor did we wish to try to operate with no cash flow at all and we felt that we could maintain the 9 hole greens in playable condition during overseeding.

Listed below is a detailed accounting of the steps employed to regrass the 18 hole Village Links greens:

A) Initial Project

9 greens at a time; #4 - #12 = August 17 to August 28, #1 - #3 & #13 - #18 = August 31 to September 9

1) Reshape green edges with paint
2) Aerify greens twice, dedoes, pick up plugs
3) Remove sod, leave ¼" thatch = 2½ days all greens
4) Aerify thatch/soil surface once, dedoes, pick up plugs
5) Fumigate greens (Methyl Bromide); Hendrix & Dail Contractor
6) Air out greens — 3 days
7) Grooved seed bed verticle mowers, 2 directions, Ryan Mataways
8) Deep seed greens, ½ lb. seed/1000 sq. ft., drop spreader
9) Topdress greens, drag level - 2 sand, 1 topsoil mix; 2 yds. per green
10) Seed greens, 2 lbs. seed/1000 sq. ft.
11) Fertilize greens, 2 lbs. actual N-P-K, 12-12-12
12) Roll greens
13) Contractor spray hydromulch on greens

B) Fall of 1981

1) Spray fungicides on greens as needed
2) Topdress greens 3 times throughout fall - 2 sand, 1 topsoil mix; 1 yd. per green
3) Cut greens twice at 5/16"; 6 cuttings ¼"
4) Fertilize greens as needed
5) Hand spike & seed small bare spots
6) Spray winter fungicide

C) Spring of 1982

1) Overseed small bare spots & topdress in March
2) Fertilize greens, readily available fertilizer, 1 lb. actual N-P-K per 1000 sq. ft., 12-12-12
3) Topdress greens twice - 2 sand, 1 topsoil mix; 1 yd. per green
4) Cut greens twice at ¼"; 10 times 7/32"
5) Spray fungicides as needed

In late October of 1981, a few Village officials and regular customers were invited to putt on the new greens and their reactions were gratifying. We opened the 18 hole course to limited play - a 100 round per day average - on May 1, 1982. Winter turf survival was better than anticipated, greens are presently growing well and have filled in nicely. The greens are a bit slow, but putting true and, as growth diminishes, we will lower the height of cut to achieve increased green speed.

Nine hole green overseeding treatment is outlined below:

A) September 10, 1981

1) Sliced 2 directions ¼" deep with Ryan Mataways
2) Seeded Penncross, 1 lb. seed/1000 sq. ft.
3) Topdress greens, drag level - 2 sand, 1 topsoil mix; ¾ yd. to 1 yd. per green

B) November 6, 1981 (dormant overseeding)

1) Spike greens, Oklahoma Power Spike
2) Seeded Penncross, 1 lb. seed/1000 sq. ft.
3) Topdress greens - sand, 1 topsoil mix, ½yd. to ¾ yd. per green

C) March 29 & 30, 1982

1) Spike greens, Oklahoma Power Spike
2) Seeded Penncross, 1 lb. seed/1000 sq. ft.
3) Topdress greens - 2 sand, 1 topsoil mix; ¾ yd. to 1 yd. per green

The 9 hole course opened to full play on April 13, 1982 and greens are improving steadily. Proper nutrition and pesticide programs are being employed to encourage the transition from C-15 to Penncross/Poa Annua green turf.

Evaluation

The overall results of our 18 hole green regrassing project have been positive and progress thus far this season is excellent. New turf came through the harsh winter in good shape and has developed rapidly in spite of the cool spring start. Greens are putting as well as expected, are smooth, true and firm with adequate speed. Customer reaction has been generally encouraging.

Nine hole greens are developing slowly. Some of these greens contain approximately 60% Poa Annua, while others have as much as 75% to 80% C-15 remaining. The transition will take time, as anticipated, but it is felt that the continual overseeding will eventually produce smooth Pencross/Poa greens.