## **Fairway Recontouring**

by David Ward Ravisloe Country Club

The initial interest in a fairway recontouring program at Ravisloe Country Club was caused by membership complaints about the lack of definition between the fairways and the roughs. This lack of definition was caused by changes in the mowing patterns through the years and because the rough was mowed at a height which allowed the annual bluegrass and bentgrass to invade the Kentucky bluegrass. After investigating the possibility of recontouring, the club decided the program could offer many benefits other than improved rough - fairway definition.

These other benefits include:

- Improving the aesthetics of the golf course. Ravisloe is a relatively flat course without a great deal of interesting terrain. By changing the contours of the fairways, aesthetics could be improved without costly and inconvenient earth moving.
- The amount of turf maintained as fairway could be reduced. This reduces maintenance costs and also makes triplex fairway mowing feasible. The recontouring actually reduced our fairway acreage from 42 to around 30.
- Playability would be improved because of a more uniform rough grass and because various sized landing zones could be established for golfers of differing abilities.

The first step in the recontouring program was testing the proposed technique for regrassing the rough boarders on a limited area. In the fall of 1982, the edges of two fairways were killed with the nonselective herbicide, Roundup, and then seeded six days later with various blends of Kentucky bluegrasses and mixtures of Kentucky bluegrass and perennial ryegrass. Through this test, potential problems were identified, techniques were refined, rates were adjusted, and materials selected. The test also sold the membership on the merits of the program.

During the summer of 1983, the grounds and greens committee at Ravisloe made the decision to proceed with the program that fall. Half of the fairways were to be done in the fall of 1983 and the other half in the fall of 1984.

Next, a golf course architect needed to be hired to design the new contours and stake out the new fairway edge. Several architects were interviewed until the committee found one it felt comfortable with. The selected architect then staked and painted the new fairway - rough boarders the week before the herbicide was to be sprayed. The design took into consideration landing areas for golfers of all abilities, the location of present and future bunkers, and the natural terrain of the course.

On September 6, 1983, the day after Labor Day, the roughs around the newly established fairway boarders were sprayed. The herbicide Roundup was used at a rate of 2½ quarts per acre. A modified Cushman sprayer, with diaphragm nozzles and flat spray tips, was used to do the spraying. The herbicide was sprayed just after sunrise while the wind was calm and the dew was still on the grass. A dye was added to the spray mixture to help avoid skips and overlaps. As an added precaution, one man followed the sprayer to watch for plugged nozzles.

In all, eleven acres we re-sprayed with the herbicide. The width of spray around the fairways varied from eight feet, one pass, to more than thirty yards depending on severity of the contour change and on how far the annual bluegrass and bent-

grass had crept into the rough.

The course was closed for the entire spraying day and the maintenance crew was instructed to avoid the spray areas. In addition the course was closed the following morning until the dew was off of the grass. Being closed the second morning is very important because our 1982 tests showed that roundup tracking will do severe damage to nontarget areas on shoes and cart tires, if play is allowed while the dew is still on the grass.

The roughs were seeded three days after the Roundup application. The 1982 test showed that a three way blend of Kentucky bluegrass with 50% Baron, 25% Glade, and 25% Majestic, seeded at a rate of ½ pound per 1,000 square feet produced the best results. The test areas with perennial ryegrass were not satisfactory due to the different growth rates of the bluegrass and the ryegrass. A slit seeded was used to apply the seed in one direction following the contours of the fairways. Four days after the seeding, triple superphosphate was applied at a rate of one pound per 1,000 square feet.

Twelve days after seeding the first seedlings were visible and by the time winter dormancy set in, the new seedlings had grown to the height of one inch. The fall of 1983 was very good for seed germination. Unfortunately, the annual bluegrass seed, already in the soil, germinated as well or better than the Kentucky bluegrass. This was also a problem the previous year during the test. Ronstar, applied the next spring did a good job of reducing the competitiveness of the annual bluegrass when used at a rate of four pounds active ingredients per acre. Various rates of Rubigan and 2, 4-D will be tested next spring to try to eliminate the remaining annual bluegrass and bentgrass in the new rough area.

Other problems encountered in this program include:

- The establishment of turf in high traffic areas. The only solution to this problem in areas which cannot be roped off is sod.
- 2. Irrigating newly seeded areas without over-watering the fairways requires considerable hand labor.
- The activity of skunks and crows searching for white grubs devastated many seeded areas which had high grub populations. Next year a grub control product will be used on all areas to be seeded.

With the need to reduce fairway acreage to contain maintenance costs and to allow for triplex fairway mowing and to increase the beauty of the course, many more courses may find the need to convert fairway grasses to rough grasses. It is hoped this discussion will be of some benefit to other superintendents considering this program.

## WHOSE JOB IS IT?

This is a story about four people named everybody, somebody, anybody and nobody. There was an important job to be done and everybody was asked to do it. Everybody was sure somebody would do it. Anybody could have done it. But nobody did it. Somebody got angry about that because it was everbody's job. Everybody thought anybody could do it but nobody realized that everybody wouldn't do it. It ended up that everybody blamed somebody when nobody did what anybody could have done.