## Scorched Earth at Knickerbocker

by RICHARD SILVAR, Superintendent, Knickerbocker Country Club, Tenafly, N. J.

In 1964 Knickerbocker Country Club decided to start a "scorched earth" program. It was not an easy decision to make because it involved a lot of work, expense and inconvenience for the membership.

The fairways were almost 100% annual bluegrass. Some years we were able to hold our own, and sometimes we didn't do so well. We tried just about everything. It was quite discouraging to work so hard, and spend so much money on something that might quit when the going got the toughest. It was hard to explain to the members that what looked good to them was something superintendents considered a weed. With the help of the USGA Green Section this job was made much easier.

Seven fairways were finished in the first year of the renovation, which was begun in September. In 1965 eleven fairways and all of the tees were scorched and reseeded. The recommendations of the USGA Green Section were followed, with a few modifications.

One week prior to the program, MCPP was applied at the highest recommended rate. This was done to remove clover. The sodium arsenite treatment was made in two applications one week apart. The first application was five gallons per acre. The second application was three gallons per acre. Water was applied every second day to germinate the weed seeds in between applications. After each sodium arsenite application we thatched and removed as much debris as possible. Two days after thatching for the second time, we fertilized with a 10-10-10 and were now ready for seeding.

The seed mixture was 70% astoria bent,

15% seaside bent, and 15% highland bent seeded at 100 pounds per acre.

The 1965 program was started in August. On the first day 11 fairways were scorched. Sections of the course were closed while work was in progress. Things went much easier and 14 days later all the work was finished and 11 fairways were seeded. Because of a shortage of water, work on the tees was delayed until Labor Day. The same rates and materials were used for the tees.

Our fairways are now mowed ½ inch during the spring and fall. During the summer months the mowers are raised to % inch. The low handicap player appreciates the low cut and the lie it affords. The higher handicap player complains that he can't use his No. 2 wood. However, they all enjoy the added roll. This is due to close clipping and the tremendous amount of thatch removed from these fairways. Thatch will take some time to build up again.

Tees are cut at % inch and are mowed with greens mowers. They receive the same care as a green, except for cutting. Tees are cut three to four times a week. They have held up well and show little wear if markers are moved daily. We also developed winter tees that are used when the grass becomes dormant. This will save on the maintenance of regular tees.

Any work on a golf course causes inconvenience to the members and results in criticism. Members of the Board of Directors at Knickerbocker knew the kind of golf course they wanted and gave this program their complete support. This program involves a lot of work, but the results have been gratifying.

# Seed and Seeding

by ALBERT NEUBERGER, Agronomist, USGA Green Section

In any renovation or rebuilding program, the seeding process is extremely important and should always be given careful consideration. What kind of seed or seed mixture should be used, at what rate it should be sown, and when

it should be sown are the three basic questions. There are many others.

Seed and Seed Mixtures

Bluegrass-fescue:

Merion and Common—35-40% usually equal amounts of each.

Illahee, Chewings or Pennlawn red fescue—55-65%.

Bentgrass (Colonial)-no more than 5%.

Bentgrass:

Astoria and/or Highland-60-70%.

Seaside-10-25%.

Penncross-10-25%.

Bentgrass used in seedings with bluegrass and fescue should be sown separately because it is so much smaller and lighter than the other two. Size and weight definitely affect distribution. Ryegrass may be used in mixtures up to 40 percent, but it has been shown that large quantities of ryegrass in mixtures inhibit establishment of the permanent grasses.

### Seeding Rates

New seeding:

Bentgrass or bentgrass mixtures—70-80 pounds per acre.

Bluegrass-fescue mixtures—100-150 pounds per acre.

Ryegrass-50-100 pounds per acre.

Overseeding:

Bentgrass-15-50 pounds per acre.

Bluegrass-fescue-75-100 pounds per acre.

### Time of Seeding

Our thoughts have tended toward earlier seeding, especially where **Poa annua** is a problem. In the Northeast, bentgrass seeding should be completed by mid or late August. For bluegrass and fescue, seeding should be completed by mid-September.

### Mulches

For problem areas such as slopes or gravelly areas, mulches may be used to some advantage. Although mulches definitely are helpful, cost usually prohibits large scale use. For smaller areas, 6 mil clean polyethylene sheets have been used with quite consistent success. The covers are especially useful where lack of water is a problem.

The importance of using quality seed cannot be emphasized too much. Certified or "blue tag" seed is recommended strongly for all permanent seeding. Certification programs have greatly reduced trash seed. By purchasing from reputable seed dealers, chances of obtaining poor seed are once again reduced. Use good seed!

# The Case for Forward Tees

by MISS CAROL McCUE, Executive Secretary, Chicago District Golf Association

In any program of renovation, serious consideration should be given to the forward tees. They're usually referred to as "ladies tees," but a great many men, too, would like to hit from a forward tee.

About half the golfers have handicaps of over 18 and most of those players would like to have a shorter, but an interesting course, with a course rating for both men and women from a forward tee. Call it whatever you choose—red, blue, any term, but rate the course so that women can play a little longer course if they would like, and so that men can play a shorter course. Many senior players or men with their wives would all like a little more interesting course to play.

When we do have a shorter tee, place it in a position so that the character of the hole isn't destroyed. On too many holes, particularly par 4's, the tee is merely moved forward 20 or 30 yards and with this all the character and interest is lost. Players who don't hit the ball quite as far are entitled to the same challenge of hitting an exciting shot, playing for a birdie, or hitting a more conservative shot, playing for a bogey or par. But, too often a hole that might be a dogleg at 360 to 380 yards is cut down to 340 for the women. Then the hazards are no longer important.

Particularly on the older courses being renovated now, give the short hitters as interesting a game as you give to the longer hitters.