

start of the season. Daily he fought graining. Because of much rain he moved holes oftener than usual.

He found that chemical control of weeds still is an uncertain factor, so depended mainly on a strong fertilizing program to develop good fairways.

By getting rid of old machinery Jim says he was able to save on gas, oil, repairs, and labor. Old machinery he declares is a greenkeeper's biggest headache and the club's biggest waste. He keeps a daily record of oil and gas consumed, also a daily record of work done on each green, and of the green's condition. His workmen have a report card they fill out each day.

Dyed Turf Pleases

Thomas says that when Dr. John Monteith developed Auragreen he did a great thing for greenkeepers. Jim relates that on the eve of the club's big tournament his No. 9 green looked very bad and he was ashamed of it. He gave it the Monteith coloring treatment and the green looked fine. Now Jim is wondering if the average member judges greens by their texture or by color.

Al Lesperance, pro-supt. of Westmoreland CC (Chicago district) has had greens this season that have been widely and favorably mentioned. Condition of Westmoreland's greens, says Al, is due to several factors.

He details:

"One is the rebuilding of the surface of the greens by removal of the sod and resodding with Washington bent from our nursery. In some cases, it meant rebuilding the contours of the greens and in others, only re-turfing. The sod taken off the greens has been used to increase the size of the tees.

"Another factor is an increase in the amounts of fertilizer we have applied, on both greens and fairways.

"Still another factor has been the removal of the roller in front of our power putting green mowers.

Remodels to Save Labor

"We have for the past four years been reducing in size in some cases, and removing completely in other cases, some of our traps that are too far from the line of play. This item has made it possible to release hours of labor for other work, without reducing the total maintenance budget, to the satisfaction of everyone."

Boyd Campaigns for Weed-Free Course

PORTAGE CC (Akron, O.), Don R. Boyd, supt., has done an effective job of weed elimination during the past season. Costs and operations of the job are outlined by Boyd as follows:

Cost of labor per acre (30c per hour)	\$6.37
Sodium arsenite, cost 100 lbs.....	11.00
Sulphate of ammonia.....	2.00
Milorganite, cost, 100 lbs.....	1.50
Weed guns	1.50

Mixture: 25 lbs. Milorganite; 10 lbs. sulphate; 4 lbs. sodium arsenite.

Rough was spread with a 9-ft. Thompson spreader, using 10 lbs. of fine ground limestone to 1 lb. of sodium arsenite; spreading this over 2,500 sq. ft.

After fairways were hand weeded, 1½ ozs. sodium arsenite to 1,000 sq. ft. was mixed in the fertilizer and applied. This killed clover and chickweed. Boyd's men then went over the fairways, filling up the holes with dirt and seed mixed. When large areas were bare, they raked and seeded. They used straight colonial bent.

Boyd adds: "We have had very good results with the above, except where we used the 1½ oz. of sodium arsenite mixed with Milorganite. The temperature should be in the 80's before the work would do much good.

Stodola's Problem Is Traffic Wear

ST. PAUL'S Keller course on which one PGA national championship and all the annual St. Paul Opens have been played, provides its greenkeeper, Harold Stodola, with one of the most difficult maintenance problems in the game. Harold has to operate a course that not only will stand the heavy traffic of public play but will be in such excellent condition for open tournament play that it will be advertised as a St. Paul civic asset by the scores of big-time pros who play it each year.

The excellence of the course and its conditioning has done much to develop public golf in St. Paul. The city's golfers brag this year as having one of their own, Bob Clark, as the USGA national public links champion.

There's been a lot doing in work at the Keller course this year. Stodola notes the high spots of the season's work:

"Our outstanding job this year was the erection of a fine pro-shop. It is made of stone, and faces and adjoins the first tee. The interior is knotty pine. This is a real building and was planned by Len Mattson, Keller pro.

"Permanent toilet facilities were made for the convenience of the galleries attending the annual Open. This meant a separate Imhoff tank and building.

"We have a picturesque bridge, 150 ft. long, across a valley. It is now over 10 years old, and has become dry-rotted, and while satisfactory for ordinary traffic, has become unsuitable for tournament crowds. This summer the bridge was supplemented by a dirt causeway across the valley entailing the moving of 30,000 yards of dirt.

"Weeds and clover in our fairways have convinced us that we must follow a definite fertilizer program. Last year we had very good success by starving our greens. The texture was finer and the grass did not scuff like it formerly did. This year we tried the same procedure but with no results. The grass was weak and could not withstand disease or traffic. So now we plan to feed well so the grass will be thick and strong and able to stand close cutting.

"This has been a tough year for dollar-spot. We spent a minimum for chemicals, not because we wanted to, but because we had to. This dollar-spot is more than a discoloration; it kills to the soil, making a mark that interferes with putting."

"Fairways for Plane Landings Not Needed": Army

DR. DANIEL FRANCIS LUBY, Syracuse, N. Y., golfer, suggests that American golf courses have at least one fairway available as an emergency landing field for planes. The suggestion was advanced by the Doctor as a civil as well as military measure.

Dr. Luby's idea has received the following comment from Major General E. S. Adams, Adjutant General of the U. S. Army:

"Some thought has already been given to the possible utilization of golf courses as emergency landing fields. From time to time in the past forced landings of military aircraft have been successfully

accomplished on some of the longer and more open fairways of golf courses. Light commercial craft can land and take off from some fairways on the larger golf courses now in existence.

"Should future developments indicate the necessity for extensive emergency fields, a study of certain adaptable fairways for indication as emergency landing strips might be made with a view to planning in each case steps for immediate conversion should the situation so demand. At the present time, however, it is not felt that the situation requires such drastic action."

Woodruff Field Day Attracts 170 Greensmen

AT least 170 persons interested in growing of fine turf turned out for the annual F. H. Woodruff & Sons Field Day held September 4 in Milford, Conn. The day was bright and clear, affording the greensmen an excellent opportunity to inspect the 315 turf plots at the Woodruff proving and breeding grounds. Flowers, bulbs and lawn equipment were also viewed.

Welcome address was given by Harold Woodruff, and explanation of the various



Not a safari of African explorers; just some of the crowd at the Woodruff field day in souvenir toppers.

plots was given by Chauncey Baker and Wm. R. Somers over a portable sound address system. Included on the luncheon menu was chicken, corn, beer, watermelon, etc., and no one went away without eating all he could hold.

Winner of first door prize, a check for \$20, went to Homer Whitson, superintendent at Bethpage Park GCse, Farmingdale, L. I., N. Y. Second prize, a pen and pencil set, was won by Paul Bigos, Oxford CC, Chicopee, Mass.

—GSA News Bureau.