Both of these surveys will be held in confidence and club names will not even need to be put on the paper. Cooperation is asked, however, because the only person you hurt by not going along with this is yourself. Details will be forthcoming in a month or two.

POA ANNUA RENOVATION

Since this is the time of the year when POA annua usually looks its worst and the golfing membership is hanging us in effigy for having such a lousy playing turf, it is fitting that one man's program for poa annua renovation is outlined. This man is Robert E. Kapherr, Superintendent of Ridgewood Country Club in Paramus, N.J., past president of the New Jersey Golf Course Superintendents Association and the father of my wife.

Ridgewood Country Club is a 27 hole private golf club in operation since the early 1900's, composed mostly of POA annua on tees, and fairways. The program for renovation was approved in 1967 and nine holes on the West course were selected to be completed first. Initially, it was planned to renovate the West course in 1967, the center in 1968, and the east in 1969. Because of dissentment from a portion of the membership, the renovation of the center course, to be undertaken in 1968, was postponed until this year. At this writing, the renovation of the center course is in progress. The nine holes worked on were taken out of play for the complete duration of the program, August 1967 to late spring 1968.

The renovation program was based on the use of Sodium Arsenite, using a total of 90 pounds of actual material per acre in three applications. The fairways and tees only were renovated with this method; they contained a population of 96% POA annua when the program started. The fairways were sprayed with a 21 foot boom on a 20 gallon per minute Bean sprayer. The tees were sprayed with a Hawk boom sprayer. The renovation operation took three weeks to perform and required the services of six employees.

The First Burn was made on Aug. 1, 1967 using 40 pounds actual Sodium Arsenite with a minimum of 50 gallons of water per acre. Approximately five days later, when the burn results were complete, the turf was aerothatched in one direction with two units, swept with two Rogers 720E sweepers to remove the debris, fertilized with two pounds of 10-10-10 per 1000 square feet and watered in thoroughly. Two days after the fertilizer was applied, the Second Burn was initiated, using 30 pounds of actual Sodium Arsenite per acre. Four days after this application, the turf was aerothatched in the opposite direction, swept, fertilized with two pounds of Nitrogen from Urea Formaldehyde per 1000 square feet and again watered. Three days later, the Third Burn was applied, using 20 pounds of Sodium Arsenite per acre. The next day, the fairways and tees were aerified once over with West Point units equipped with hydraulic lift, to prevent ripping of the turf on the turns. The turf was again aerothatched in a direction other than the first two, seeded to 20% Penncross, 20% Seaside, and 60% Astoria Certified Bentgrasses at 70-80 pounds per acre. When the turf was dry, an eight foot dragmat was drawn in two directions. The turf was then swept with the brushes set to barely touch the ground to pick up the rolls of thatch. The seed was not picked up with the brushes set in this manner. The turf was then rolled to firm the soil and watered until germination occurred. During the renovation eight feet of the bordering rough areas was submitted to the same operation with the exception of the seeding, this was to a bluegrass, fescue mixture.

The results of the seeding were very gratifying after all the work that went into the three week project. I, personally, inspected the nine holes renovated in October of 1967 and was amazed at the catch of bentgrass. Another superintendent in the Mid-Atlantic area also viewed the results that fall, Ed Dembnicki, of Indian Spring Country Club. Ed also has an interest in Ridgewood Country Club, his brother is Head Golf Professional.

The follow up program which Bob Kapherr has instituted to keep the POA annua from gaining a foothold again is by using Tri Calcium Arsenate. In early April, 1968, when weather permitted, Chip Cal was applied at 5-6 pounds per 1000 square feet. His
fertilization program contains no phosphorus in a 20-0-10 mixture. Four to four and one half pounds of Nitrogen per year are applied with frequent applications of 100 pounds per acre. The fertilization is held off until May when the bentgrass has begun growth. Disease control on the renovated nine holes in 1968 consisted of one application of Cadmium Chloride at one ounce per 1000 square feet in the early spring and throughout the year, six applications of PMAS plus Thiram were applied. Planned yearly, as was initiated in the Fall of 1968, aerotheratching and overseeding will be done in areas where POA annua encroaches and is weakened by the Tri Calcium Arsenate. As of this summer, the bentgrass population on the renovated nine holes is estimated to be 65 to 75% and increasing with the continued use of Tri Calcium Arsenate.

Bob Kapherr is now progressing with the second nine hole renovation since the majority of the membership is satisfied with the results of the 1967 program. He sees a lot of work ahead of him again this year but the fruits of his labor are worth it. He says, "when you can reduce your irrigation alone by 50%, it's got to be worth it."

Dave Fairbank