UNITED STATES GOLF ASSOCIATION
GREEN SECTION

NORTHEASTERN OFFICE
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NORTHEASTERN TURFLETTER

Vol. I No. 3 September 1954

GOLF THE SPEEDWAY OR THE GREENWAY?

Almost without exception during visits to golf courses in the Northeast this season we have been asked, "What about these electric cars? Are they here to stay? What effect will they have on our grasses?"

To date we have observed very few electric cars in use on golf courses in the Northeastern region. These cars were introduced in the West and Southwest and, to the best of our knowledge, have so far been used mostly on courses where the tougher bermudagrasses predominate.

In the Northeastern region, where cool-season grasses predominate, there is no question but that damage to turf will occur. Cool-season grasses are in their "danger period" during the hot summer months of July and August, when electric car owners would undoubtedly use them most. At some time during this period unwatered turfgrasses are at the wilting stage. If in a state of wilt, the use of many electric cars at this time may be the difference between turf and no turf.

On watered fairways or just after heavy rains, wheel marks and soil compaction will be other factors to consider. Summer-rule play might be impossible at that time because of "rutted" fairways. Undoubtedly, too, the compaction that results from use on wet soils will result in the loss of some of the permanent turfgrasses. Compaction has been one of our more serious problems on turf areas previous to the innovation of electric cars - what the heavy use of these vehicles will do, only time will tell.

We have all observed the damage to turfgrasses as a result of the use of the small bag-toting caddie carts -- especially on areas where players are channeled around greens and tees. Player education is a difficult program to get across to a membership of 300 to 400 golfers. There is no reason to believe that electric car users will be any easier to educate.

At one course this past summer some "legalized vandalism" was observed. The owner played his shot from a trap, hopped into the car, drove through the trap, and went up across the green. Unfortunately, the sand was not soft enough to bury the "beast."

The only place that we now see for these cars is to allow persons who, because of reasons of health (age or physical infirmity) can not now get around a golf course. We would, however, at all times leave to the superintendent and his green committee the decision as to whether cars should be allowed on the course on any given day. Of course, there are many other factors to consider - not least among which is the difficult question of rules and regulations governing play among users vs. non-users. In any case we feel that the prime consideration should be the protection of the tremendous country club investment - the golf course and its greenway.

FALL WEED CONTROL

The fall season is usually the time for weed control in golf course operations. During this season hundreds of thousands of gallons of herbicidal sprays will be applied to acres of turfgrasses.

2,4-D will be used for broadleaf weed control at rates ranging from 1/2-pound to 1 1/2-pounds (actual) to the acre. On bentgrass fairway turf it is advisable to use between 1/2 to 3/4-pound actual 2,4-D to the acre, as the bentgrass may be injured by heavier rates.

Sodium arsenite is another popular herbicide for weed control in the fall. Sodium arsenite is most effective on chickweed, knotweed, clover, and annual bluegrass -- in the fall weed category. The usual rate of application is from 1 pound to 1 1/2-pounds of sodium arsenite to the acre. It seems that the permanent grasses must build up a tolerance to sodium arsenite, and the first application generally discolors turfgrasses more than subsequent treatments. Therefore the first application should be made at the rate of not more than one pound of sodium arsenite to the acre. Rates then could be boosted to 1 1/2-pounds, and treatment intervals should be from seven to ten days.

Generally as a combination knotweed, chickweed and clover herbicide, it has been observed on courses in the Northeast that sodium arsenite produces more satisfactory results than do 2,4-D preparations.

The use of 2,4,5-T as a selective herbicide for clover control has come into prominence the past two years. At rates of 1/2 to 1 pound, 2,4,5-T (acid equivalent) very satisfactory control of clover has been obtained. The month of October is a good time to eradicate clover. 2,4,5-T and 2,4-D can be mixed as a dual-purpose spray for broadleaf weeds and clover. We have observed good control with a mixture of 1/2-pound of 2,4,5-T and 1/2-pound of 2,4-D to the acre. According to tests conducted by Daniel of Purdue, and Cornman and Jagschitz of Cornell, one pound of 2,4,5-T can be mixed safely with 1/2-pound of 2,4-D. The amine form of each is preferred as the danger of drift to ornamentals is lessened as compared with water forms. Don't become impatient as the action of 2,4,5-T is slow. Wait three or four weeks before you attempt to reapply this herbicide.

DO'S AND DONT'S

Don't apply any of these herbicides if soil moisture conditions are unsatisfactory.

Don't apply herbicides on seedling turfgrasses. Application prior to seeding works out fine, but once seedling plants emerge they are very susceptible to injury from herbicidal sprays.

Do add approximately a half cup of detergent, such as Glim, Tide, or Dreft, to each 200 gallons of herbicide solution.

Don't expect that an herbicide program alone will give you a dense cover of permanent turfgrasses. A good program of feeding is especially important to keep turfgrasses thriving (along with the many other cultural practices required) to spread and fill voids as weeds are eliminated.

Do calibrate your sprayer exactly.

HOW TO CALIBRATE A BOOM-TYPE SPRAY RIG

1. Fill the sprayer tank with water.
2. Mark off a distance of 660 feet in a straight line.
3. Drive the marked 660 feet at a constant speed -- opening the spray at beginning and closing it at the end of the marked 660 feet.
4. Accurately measure the amount of water needed to refill the tank.
5. Multiply 66 times the gallons of water sprayed on the marked 660 feet (steps 3 and 4) and divide the product by the width of the boom (in feet). The answer will be the amount of solution that you will apply per acre.

Example as a Guide

1. Fill the spray tank to the brim (and for practical purposes we'll suppose it is a 200-gallon capacity tank).
2. Speedometer reading constant (5 miles per hour) during travel over marked 660 feet.

   If farm tractor is used record the notch and throttle gear. Ex. -- throttle is 3rd gear, notch 9.

   NOTE: A speedometer is preferable as speed can then be more accurately gauged. When traveling up and down slopes with farm tractor set at a certain notch and gear reading - speed varies.
3. It took 5 gallons of water to refill the tank after spraying marked 660 feet.
4. 66 x 5 equals 330.

   The width of the spray boom is 15 feet; therefore 330 divided by 15 is 22. Thus your spray rig would apply 22 gallons of solution to the acre at the specified rate of speed.
5. Therefore 200 gallons at the same rate of speed would cover 9.09 acres.

NOTE: This system of calibration can be adapted for calibrating fertilizer spreaders also.

Northeastern Turfletter

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