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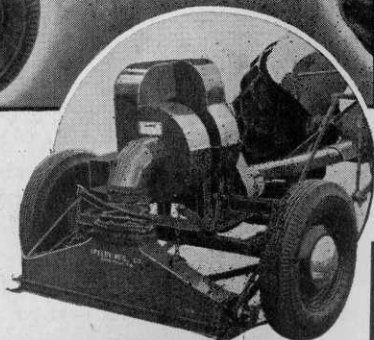
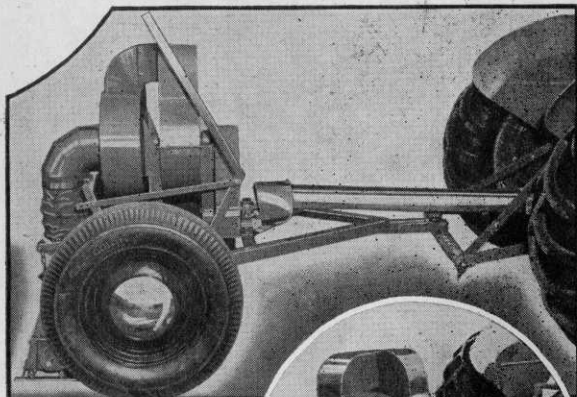
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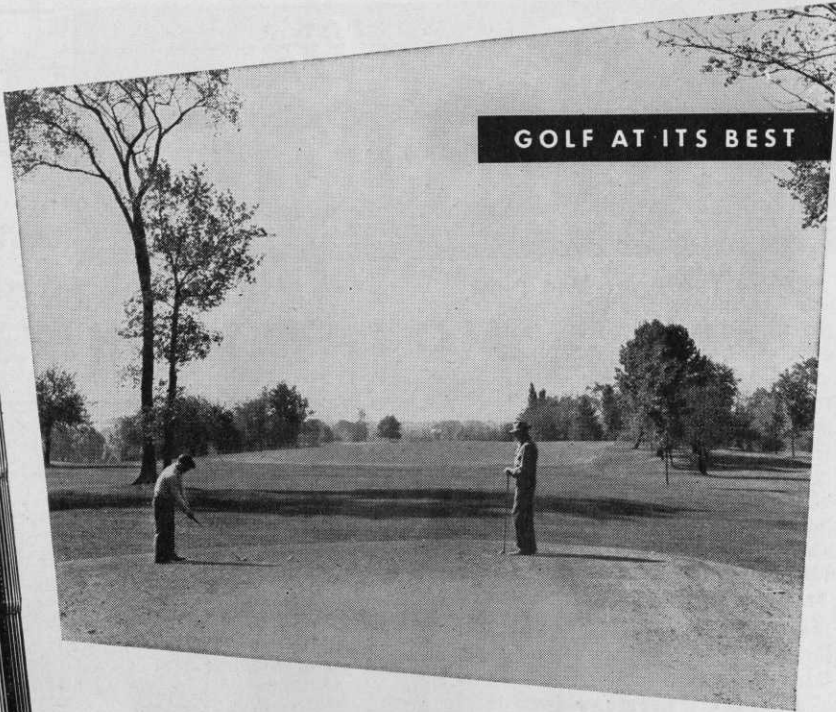
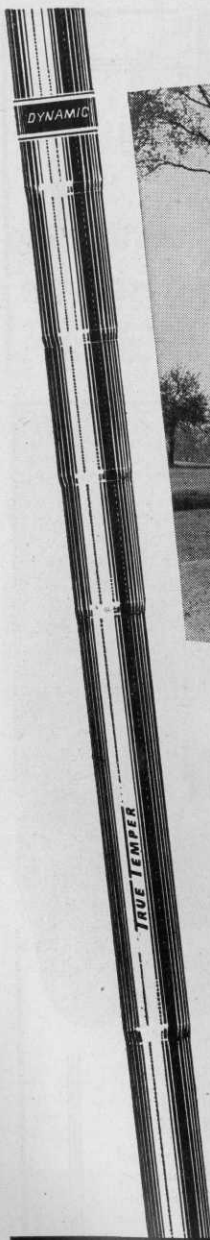
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Chart Tells 25-Year Story of Club Business

By **CYRUS LUND**

The accompanying graph shows the history of the past 25 years in the life of a typical American country club with an average membership of 330 during the period scrutinized.

All such clubs are alike in having 18 hole golf courses and reasonably elaborate club houses; so many players could comfortably use the course and in a great many instances a house to correspond was constructed simultaneously. After those basic requirements were met the clubs differed in the details of geographical location, operation, clientele and in the added play opportunities afforded.

The membership and other lines in the chart almost duplicate the industrial curve of the U.S. 85% of the time and it is to that line the destiny of the average country club always seems tied. Some clubs have achieved stability of income and operation—softened the brunt of business depressions—by watering their golf courses, putting in swimming pools, or hiring overall managers to correlate their fixed expenses and increase their sources of income; but not this one. It is just an average club 10 miles from town, that has rolled along with the business tide of the country, good years and bad years alike, and always under the management of 2 to 3 active or passive committee chairmen, motivated by pride, importance, economy, vision, or other virtue or fault; and intimately understanding, or not understanding, that which they directed.

Proving that this old American custom of operating a country club does not always turn out badly the club in the chart today owes less money, has more members, and made more net profit in the year just passed, than it did in any other of the quarter century. Curiously enough, however, just 3 years ago this spring the club was at its all time low with the bondholders looming closer every week.

The club rolled uphill with prosperity and downhill with depression. The loose liaison of committee chairmen, with short tenure of office, involved little long range planning. In the 25 years the club never had a membership secretary charged with maintaining that fountain-head of club income; but there was considerable debate from time to time as to the amount of annual dues to be charged. The answer always seemed to be higher dues because more members, or popular membership, would have tended to take the edge off the distinction of belonging; and it was privately held no light badge of importance to have joined. Nor was it! However, the number of those willing to pay to play dwindled steadily during the 2 main dips of the chart lines; there were not enough of them, or there was too much outside competition for their spare time in the highly developed American scene; or they were not getting enough for their money. For 1946 lines in the graph hit new all time peaks and should go higher in 1947.

In the Roaring Twenties

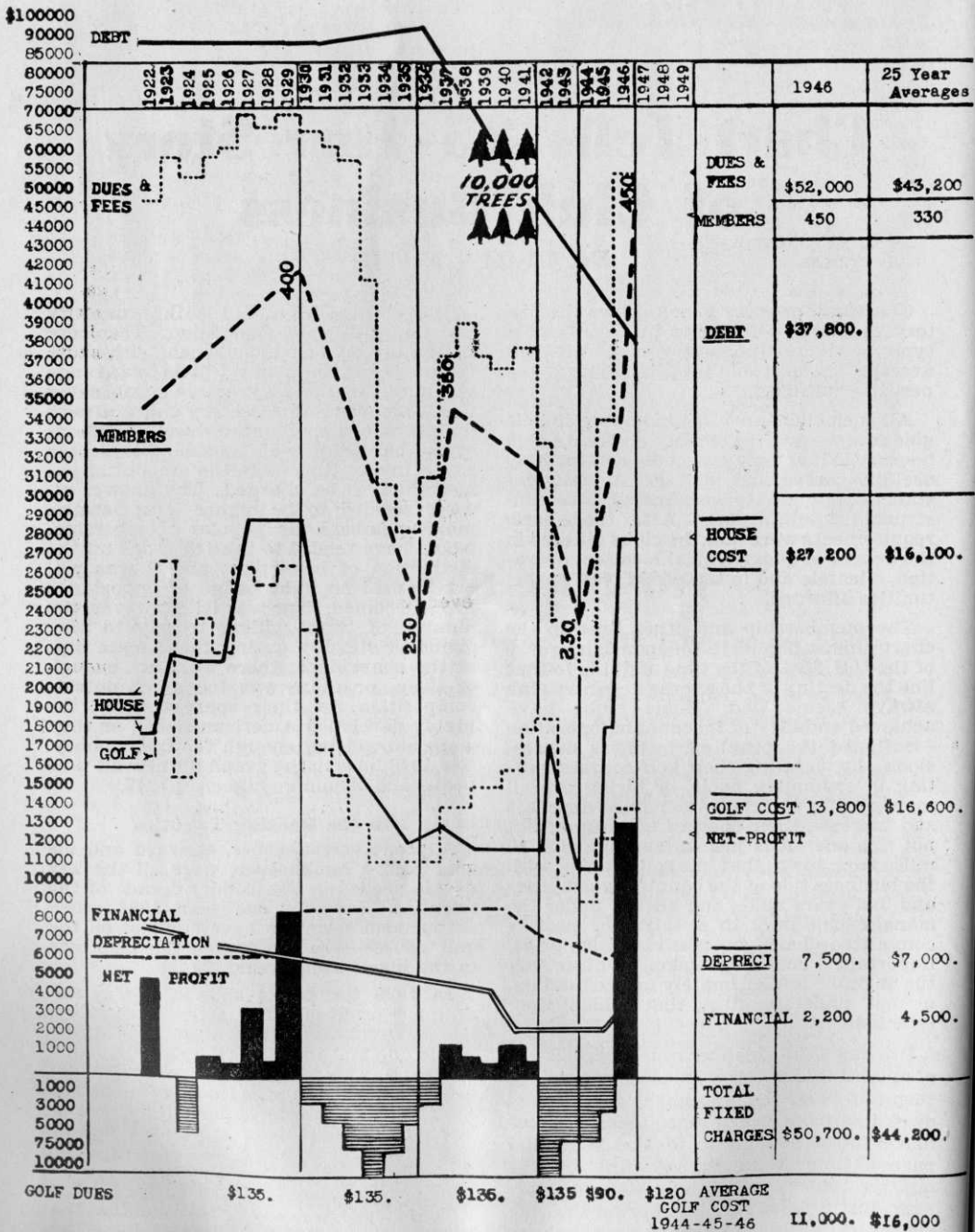
A pro, a greenkeeper, steward and his wife, and a bookkeeper, were all the key people needed in the wonder decade of the twenties. Save for one year, 1923, when enthusiasm seems to have run riot on the golf course—see the chart—the club was in the black every year.

In 1929 the books showed the extraordinary profit of \$8500. after depreciation and \$100. token payment was made on the bonds due and the \$90,000. debt postponed 10 years. The club had a quarter million original investment and there was no particular worry about the debt. Golf was a new and wonderful force in the U.S. and still in the flush of its youth.

Then the Dirty Thirties

There was never any recognition that the fixed overhead involved in maintaining the golf course, meeting the general house

25 Years of American Golf



overhead, and servicing the debt, constituted the 3 items of fixed, daily calendar charges that could be reasonably estimated and budgeted from year to year. Their total could even be divided by the number of members, and then, with proper gradations for the various classifications, the exact assessment each year could be ascertained in advance. Nor did anyone acknowledge that was a method of ascertaining the annual dues subsidy which membership paid because it did not expect management to recover those items from the seasonal operation of bar and dining room. To do so would have forced measurement on bar and dining room, singly or jointly, but by mingling the whole, scrutiny of efficiency in either just never came to pass.

Average charges during the 25 years for the 3 departments, house, grounds and financial costs, were like this:

	25 years	1946
Grounds	\$16,600	\$13,800
House	16,100	27,200
Financial	4,500	2,200
	\$37,200	\$43,200
Depreciation	7,000	7,500
	\$44,200	\$50,700
Dues and Fees	43,200	52,000

It will be observed dues and fees came within \$1000. of equalling the depreciation and fixed charges each year of the 25, on the average.

In the 1930 decade it was not easy to bring down these fixed charges; but they had to come down to meet income and the surviving members suffered in loss of service on course or in house. Nature took its course and finally by 1935 there was a big note at the bank in addition to the bonds. The Board had always been loaded with members owning some social distinction, but regardless of that no one seemed to know how to stop the sagging lines of the chart, which itself had never been organized. In late 1935 three successful business men golfers were elected. One went after the debt, another after the house and general costs, and the third served as president and got another golfer to look after membership. They did not control golf course costs except as board members.

By waiving the initiation fee and the stock purchase requirement 120 new members were drummed into line. The new associates had no voice, nor were they required to buy one, which some old timers thought just as well. By 1937 the industrial curve was up and so were dues and receipts; the club was in the black again. In the 25 years there were 13 black years and 12 red ones, after depreciation, but the red ones were heavier by the amount of depreciation not earned for the entire period.

Bonds Refinanced

The member who went after the debt cleared up the bank note and then, by a complicated maneuver involving, in part, collection of dues 5 years in advance, he refinanced the bonds which were due again. When the smoke cleared away the annual interest charge was below \$1500. The financial charge rose to \$2200. in 1946 when bold waiters helped themselves to the contents of an open safe.

Hard and fast arrangements to pay off the debt were entered into and the graph shows it is rapidly passing out of the picture. It is down to \$37,800. in ten years from the \$57,000. point at which it was rearranged in the late 1930 decade. Debt payments, of course, meant little new equipment purchased during that time. This debt reduction, in a way, was the most permanent thing evolved by the 3 business golfers. Like other short term directors in other clubs, they made their mark and then either lost interest or were superseded by the roll back in control of the old conservative element which will probably always feel, until it dies out, that the club after all belongs to it.

There wasn't much organized information available in the 1930s on the successful conduct of a country club; nor up to this time has much survey information with details on policy, dues and operational costs for any group of successful country clubs ever reached the hinterlands, save perhaps for the recommendations of George May in the early 1940s.

The golfer called in to restore membership in 1937 watched new and old members continue to slip away and analyzed the situation as one which did not give good value for dues on the course itself, because modern, competitive courses evolved by the passage of time in the area, had made the original club course somewhat inferior for the rate charged. Five years before May's landscaping recommendations were made, and starting in 1938, this person engaged in a 4 year landscaping operation on the course, involving the planting of 10,000 evergreens. The war would have shut down this job anyway but it was completed in the spring of 1942. It has been estimated the trees have already added \$100,000. to the value of the club property and will probably be worth twice as much in another 10 years. Already there is some testimony the course will be known widely for a particular kind of scenic beauty seldom met. Thus, while one golfer fixed the \$100,000. debt to disappear another added an asset to be worth in a similar period of time perhaps \$200,000. Two golf members gave the club two jobs to be worth \$300,000.

(Continued on page 89)

George Lake's "Free" Lessons Pay Him Big Dividends

By **BOB HALL**

George Lake, professional at the Municipal courses at Recreation Park, Long Beach (Calif.), who is also president for the third straight year of the Southern California PGA, is a businessman-pro. But he has taken a leaf from the Bible, that item about "cast your bread upon the waters and ye shall receive it back threefold", for one of his most enthusiastically-received promotions.

George has developed a program of free group lessons, designed primarily for the benefit of the citizen or youngster desiring to learn the game of golf—and this year he reports "more interest than ever before".

The whole program is built on the premise that it's more blessed to give than to receive—but George seems to be doing all right even though he gives many hours of time to free instruction for both the adult and teen-age boys and girls.

"Many pros won't fool with classes, especially free ones," George will tell you, "because they don't think it pays. I am interested in golf promotion anyway, but it does pay. I feel that the easiest way to sell the adult golfers merchandise is to show an active interest in their childrens' golf swings.

"And what's more, when the youngsters get to that stage where they enjoy their regular golf games, it gets mom and pop out, too, and that's 100% family promotion."

George's mass instruction series covers every golfer or prospective golfer within a radius of 25 miles of Long Beach.

There are school boys and girls, ranging in ages from 10 to 19. There are more advanced high school boys who are competing on golf teams in inter-school matches. There are more advanced adults, who golf regularly but obviously could use a free suggestion on correcting a faulty swing or stance, and there are other adults, largely businessmen and office girls, who have never golfed, who are given a mid-summer clinic under driving range arc-lights.

George Gets Them All

Within this group are all the persons who hold the future of golf—the young people, the businessman and the businesswoman.

They are finding that golf is not "so expensive", that modern production methods and municipal organization are bringing



Youngsters of all ages are given basic training by George Lake in his popular instruction classes.

the equipment, green fees, and, in short, golf, within the range of every man, woman and child. They are being educated to the game, and when they understand and enjoy it, they realize that golf takes as much finesse as any sport, and brings double returns in health and keen living.

Lake began his high school classes with the opening of the school semester last September, holding weekly sessions for girls and boys of the several Long Beach high schools, all of whom are accompanied across-town to the course by their physical instructors.

He has augmented this with four classes each week, beginning in February, and lasting until mid-June, for the more advanced tournament players among the boys.

Here's the general outline of the whole program:

1.—ADULTS:

A.—Each summer (now approaching the fourth annual event) a series of 6 free adult clinics for any golfer is conducted at night on driving ranges. A public address system is rented, at extra cost to George and to the several other pros in the area who assist in this promotion.

It is estimated that of the several thousand who have taken advantage of this promotion, more than 50 per cent are per-

sons who have played less than 10 rounds of golf.

A special trophy is awarded to the absolute beginner who shows the best swing after the series has been completed.

B.—Professionals within the area, led in this case by George's suggestion, have begun a general policy of playing golf as often as possible with different foursomes, to pass along helpful hints to those who have their troubles, and in the long run to become better acquainted with every club member and guest.

C.—Special demonstrations of golf shots are made at regular intervals by Lake at the monthly meeting of the men's and women's golf clubs, shots being hit into a canvas net. The program is augmented by a golf lecture, and in some instances by planned exhibition matches the afternoon preceding the meeting.

2.—JUNIORS:

A.—Each summer, immediately following the close of the school term, and with assistance from school officials, Lake conducts a 6-week free instruction series for boys and girls of teen-ages. In fact, the program is now entering its 18th annual classes come late June.

These lessons are free, even to the loan of golf clubs should the youngster not have any, with a slight charge of a few cents for the use of driving range balls in the hitting phase of the lessons.

Lake follows this class instruction program with the city junior and juvenile championship tournament for boys and

girls under 18, rents them club sets for 15c at all times, and course officials let the juniors play for 10c.

On free instructions days, Lake allows the kids to use the driving range balls at 2 balls for a penny.

Tie-up With Schools

B.—A lecture series, much along lines of the adult demonstrations at club meetings, is conducted by George on the stages of the several schools during assemblies, the talk consisting of shotmaking, proper swing, stance and grip, and in many cases using a student selected at random from the assembly for a guinea pig.

C.—Augmenting the high school program, George goes a bit deeper in cooperation with city school officials, and visits as often as possible—in fact, whenever a request is made—the gym classes of junior highs to demonstrate proper methods.

D.—This year, George announces that he's going to form junior golf clubs for both boys and girls, following the summer clinics, let them select their own officers, keep their handicaps, and conduct a sweepstakes once a week, with regular tournaments for "Father and Son" and "Mother and Daughter".

"I feel that this entire series, despite being a bit expensive in time to the pro, has a definite value in making the pupil and his parents PRO conscious.

"We stress not only swing, stance and grip, which are all necessary to correct golf, but we bring out the benefits of golf

(Continued on page 102)



George Lake (right) and his assistant Frank Grant (left) demonstrate grip and stance to pupils at one of the Long Beach junior golf schools at Recreation Park municipal course.

Weed Seed Kill In Soil by Chemicals, Fertilizers

By J. A. DeFRANCE

Rhode Island Agricultural Experiment Station

The removal of weeds from seedbeds, newly planted turf, gardens, and field crops, whether by hand or by cultivation, requires time and expense. Various chemicals and fertilizers have been applied to soils contaminated with weed seeds in a series of studies carried on for several years in the greenhouse and field at the Rhode Island Agricultural Experiment station. Results of these experiments indicate the practical use of such chemicals and fertilizers for killing weed seeds in soils prior to planting turf or other crops.

Materials are available which will destroy weed seeds in the seedbed, leave little or no toxic residue for future plantings, and at the same time add fertility to the soil, thus saving much time and money involved in weeding and maintenance.

Materials, Methods and Results

Chemicals and fertilizers used for treating soil contaminated with weed seeds were as follows: Acrylon, allyl alcohol, ammonium nitrate, ammonium sulfamate, ammonium sulfate, ammonium thiocyanate, Biuret, Granular "Aero" Cyanamid, dimethylourea, limestone, Miloganite, Milarsenite, sodium nitrate, ammonium nitrate, Uramon, and 2,4-dichlorophenoxy-acetic acid including the ammonium, calcium, potassium and sodium salts, and the butyl ester of 2,4-D. Rates of application were on the basis of 1,000 sq. ft. One-eighth pound of white clover, $\frac{1}{4}$ pound of Rhode Island Colonial bent or $\frac{1}{4}$ pound redtop, and 1 pound weed seed obtained from a bent grass cleaning process were thoroughly mixed with the upper 3 inches of the weedy field soil a few days before the treatments were applied. The chemicals and fertilizers were applied dry or in solution and were worked into the soil either with a rake or a hand wheel-cultivator. Grasses and radishes were planted at weekly intervals in the treated soils in order to determine the time required for the dissipation of toxic material. Observations were made on the germination and growth of weeds and crops.

Tests were conducted in the greenhouse and in the field to determine: (1) the concentration of the materials which would effectively prevent germination of the weed seeds in the soil; (2) how soon after the application of the materials, grasses and other crops could be safely seeded or

transplanted; and (3) the influence of the materials on the pH, NH_3 -nitrogen and NO_3 -nitrogen and conductivity of the soil.

The results of tests in the greenhouse during 1946 are given in Table 1. All materials used for soil treatment gave very good inhibition of clover, grass and weeds and, in general, after a few weeks did not leave toxic residue sufficient to hinder growth of ryegrass and redtop.

Ammonium sulfamate at 2 and 3 pounds inhibited nearly all weeds in flats; plantings of ryegrass 2, 4 and 6 weeks after treatment were satisfactory, but a lapse of 6 weeks after treatment appeared necessary for good germination and growth of redtop where 3 pounds of this chemical were used.

Ammonium thiocyanate at the 3-pound rate also inhibited nearly all weeds and appeared to need a lapse of 4 weeks after treatment for satisfactory ryegrass and 6 weeks for redtop to grow. Biuret at 3 and 5 pounds gave good control of weeds but the soil needed more than 6 weeks to lose toxicity so that ryegrass and redtop could be grown. Twenty-five pounds of sodium nitrite were needed to kill all weed seeds and good growth of ryegrass and redtop resulted when planted at intervals of 2, 4 and 6 weeks after treatment.

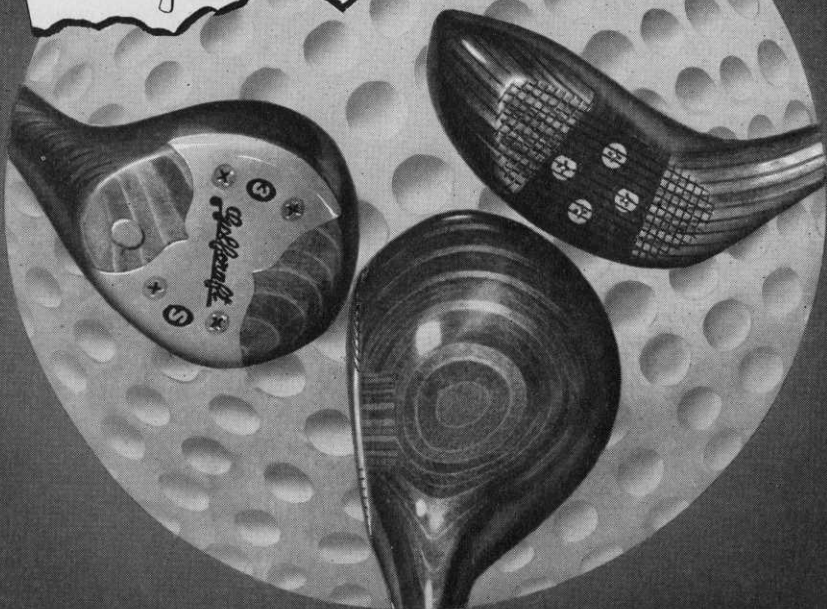
Cyanamid at 50 pounds gave control of weeds in the flats and good growth of ryegrass was obtained from plantings at the end of 4 weeks; good growth of redtop resulted at the end of 6 weeks. Uramon also gave control of weeds at the 50-pound rate in flats.

Ammonium, calcium, potassium and sodium salts of 2,4-D gave fairly satisfactory inhibition of weeds in the flats. Plantings of ryegrass 2, 4 and 6 weeks after treatment were satisfactory but, in general, redtop required more time in comparison for satisfactory germination and growth.

The materials used and the results of field tests in 1946 are presented in Table 2. After the treatments were applied to plots 10' x 10', plantings of radishes, perennial ryegrass and Colonial bent were made at intervals of 2, 4, 6, 8 and 11 weeks in rows across the plots. All the chemicals, fertilizers and combinations at the rates used,



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TABLE 1. Weed control in seedbed, greenhouse test, 1946. Materials and rates; residual toxicity as shown by growth response of ryegrass and redtop planted 2, 4 and 6 weeks after treatment; per cent of weeds and grass in treated soil.

Material	Lbs. per 1000 sq. ft.	Growth response.						Per cent weeds and grass in treated soil	
		Ryegrass			Redtop			1 month after treatment	
		2	4	6	2	4	6	Weeds	Grass
Ammonium sulfamate	1	E*	E	E	G	G	E	10	40
Ammonium sulfamate	2	G	E	E	G	O	E	T**	T
Ammonium sulfamate	3	G	E	E	F	P	O	0	T
Ammonium thiocyanate	2	F	E	E	O	F	E	1	5
Ammonium thiocyanate	3	P	G	E	P	O	E	1	4
Biuret	3	O	F	P	O	O	G	T	1
Biuret	5	P	F	F	O	P	F	T	T
Sodium nitrate	15	G	G	G	G	F	E	2	3
Sodium nitrate	25	G	E	G	G	F	G	0	1
Ammonium nitrate	50	F	G	F	G	F	F	0	3
Ammonium nitrate	75	F	F	G	O	O	G	0	3
Cyanamid	50	P	G	E	P	P	E	0	0
Cyanamid	75	P	G	F	P	P	F	0	0
Uramon	50	G	G	F	G	G	F	0	0
Uramon	75	G	G	G	F	P	P	0	T
2,4-D ammonium	1/8	G	E	E	P	P	E	3	2
2,4-D ammonium	1/4	F	E	E	P	O	E	T	2
2,4-D calcium	1/8	E	E	E	F	F	E	3	2
2,4-D calcium	1/4	G	E	E	G	F	O	2	2
2,4-D potassium	1/8	G	E	E	P	G	G	6	3
2,4-D potassium	1/4	E	E	E	P	P	P	1	2
2,4-D sodium	1/8	G	E	E	P	P	P	2	2
2,4-D sodium	1/4	G	E	E	F	P	O	2	2
Check	None	E	E	E	E	E	E	100	100

*P,F,G,E= Poor, fair, good or excellent growth response of crops planted after treatment.

**T=trace, less than 1%.

except Acrylon and Biuret, gave good control of weeds.

Eight weeks after treatment no weeds had appeared where the following were used: Cyanamid 75 pounds plus 1/8 pound of sodium salt of 2,4-D; 1/4 pound of sodium 2,4-D; 1/2 pound of 2,4-D ester; 4 and 6 pounds ammonium thiocyanate, 125 pounds Cyanamid; 75 and 100 pounds of Uramon; 100 pounds of ammonium nitrate, ammonium sulfate, or sodium nitrate.

Individual plantings of perennial ryegrass and Colonial bent, made as soon as 2 and 4 weeks after treatment, responded with satisfactory germination and growth in soil where many of the treatments had been applied and excellent control of weeds had been obtained.

Cyanamid at 75 pounds per 1,000 square feet was one of the treatments which appeared to give promise of inhibiting weeds in the turf seedbed without leaving a toxic residue for too long a time and of adding fertility to the soil. Very little difference in degree of weed control occurred from the two methods of application of Cyanamid. Both cultivating and a combination of cultivating and raking gave very good control.

The 2,4-D materials gave good control of weeds and, in general, appeared to have a

longer toxic duration for bent grass than for ryegrass, whereas with the other chemicals and fertilizer bent grass appeared more tolerant than ryegrass. Radishes appeared to be more affected by the residual toxicity than either ryegrass or bent grass.

Tests were made also on 5 new putting greens at 2 nearby golf courses. Treatments with Cyanamid at 50 and 75 pounds per 1,000 sq. ft. were used and it was estimated that 75% to 95% control of undesirable grasses and other weeds was obtained. When the treated soil was seeded with velvet bent 6 to 8 weeks after treatment, satisfactory growth occurred.

Soil Sterilization Practical

A series of experiments in the greenhouse and field showed that several fertilizers and chemicals inhibited weed growths either by killing the seeds or by killing seedlings shortly after germination. The materials were applied dry or as spray solutions and thoroughly mixed by cultivation or raking into the upper 2 or 3 inches of soil.

The period of time after treatment before grass and radishes could be planted safely varied with the different materials and the amounts applied.

Treatments of certain fertilizers or