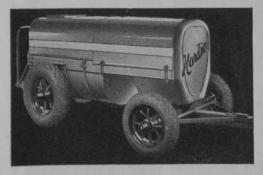
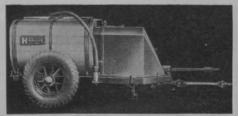
Weep Your Grounds Up To Par With A Hardie Sprayer



Two popular Hardie Golf Sprayers are shown above. The Tractor Trailer model operates with power take-off from golf tractor.



PUT a Hardie Sprayer in the budget and assure the good appearance of grounds and greens. Save valuable trees and shrubbery from pests and parasites. Economically apply liquid fertilizers and weed killers. A Hardie saves its cost over and over. Forty sizes and styles. Write for catalog. The Hardie Mfg. Company, Hudson, Mich., Los Angeles, Calif., Portland, Ore., New York City.

HARDIE DEPENDABLE SPRAYERS



LET HEADQUARTERS for BENTS QUOTE YOU 1940 BUDGET PRICES

Coos County Seaside Bent
Astoria Bent
Rhode Island Bent
Triple A Bent
Colonial Bent
Chewings Fescue (Imported and Domestic Grown)
Fancy Red Top
Rye Grasses
Kentucky Blue
Also True Velvet Bent (94% pure)
South Mixed German Bent (90% pure)
Creeping Red Fescue (97% pure)
Reliable Putting Green, Fairway and
Tee Formulas.

"Golf Turf" free on request



132-138 Church St. (Corner Warren St.) NEW YORK CITY





At the Sevilla-Biltmore, Havana – Where smart travelers of three continents gather, PABST Gets the Call!



Miami-Biltmore — means "Center of the Wintertime World." Here topmost quality rules every choice. That's why pabst Gets the Call.

FREE MENU RIDERS* BOOST PROFITS

Full color menu riders are yours for the asking. They're increasing check averages for many other managers... Why not send for samples?



• Managers of the truly smart restaurants, hotels, clubs and lounges know that increased prestige means increased profits. They know, too, that their places are judged by what they serve. That's why they serve Pabst Blue Ribbon. For Blue Ribbon is known by everyone as the beer of quality. It will pay you to feature this famous beer! So for the sake of your prestige and your profits . . . Give Pabst the Play!

HERE ARE A FEW OF THE SMART PLACES THAT FEATURE PABST:

Mark Hopkins, San Francisco; Copley-Plaza, Boston; Mayflower Hotel, Washington; St.Regia, New York; Roney-Plaza, Miami Beach; Greenbrier, White Sulphur Springs; Ambassador, Chicago; Royal Hawaiian, Hawaii; Waldorf-Astoria, New York.

Copyright 1939, Pabst Sales Company, Chicago

Pass the word... YOU SERVE
Pabst BLUE RIBBON



OCTOBER, 1939

WAR and GOLF

By C. Kent Bradley

Prolonged European conflict will cause scarcity of some course products, but we are in better position than in 1914

WITH Europeans throwing things at each other, we may consider the possible effects on the golf industry, and specifically in this article, golf course maintenance costs. Reviewing golf's history during the last World War, interviews with golf supply manufacturers and dealers, and with some personal predictions thrown in, eventualities may be considered, should Europe dig in for a prolonged scrap.

A major war affects the countries of the world, both belligerents and neutrals. We may, within reason, expect scarcities in some lines, and total unavailability in other supplies. Today, however, we are in a better position as regards our domestic goods, than we were in the period of 1914-20. Our home-grown grass seed, especially bents, render us a better supply, and better strains, than we had 20 years ago. There is, however, a possibility of some fields being plowed under, and planted to cereal grains and other agricultural products. Ocean freight rates and war risk insurance premiums will increase and this rise will be passed on to our club-consumers.

Mercury Costs Rise Fast

Shortages of foreign materials will be largely in peat moss, potash, natural nitrates, New Zealand grown seed, tool steel, fungicides and rubber. At this writing, dealers report price rises on lead arsenate, tires, garden hose, seed, fertil-

izer constituents, tractors and mercurial fungus disease controllers. One brand of the latter that sold early this spring at \$1.30 a lb., is now marked up to \$2.55 per lb. Mercury is used extensively in munitions, marine paints, and in the making of wool felt.

Shipments have practically stopped to the U.S. of Cal-nitro from Norway, German potash and urea, Chilean nitrate of

soda and baled peat moss.

Modern chemistry is able to extract domestic potash from borax deposits. DuPont produces "Uramon", containing about 42% nitrogen, and "Neoprene", artificial rubber. We have enormous deposits of peats in Florida, Maine, Michigan, New Jersey and many other states, that compare very favorably with imported baled peat.

Smart Clubs Place Orders

Dealers are quoting cash prices, subject to immediate acceptance and delivery. Smart club officials are placing next year's orders now, and storing their needs for the 1940 season. They plan to send their superintendents to the GSA conference and equipment show to be held in New York City, February 6-9, 1940, so their men can discuss maintenance strategy with others familiar with emergency conditions.

For some years past, greenkeepers have been concerned as to the welfare of laborers released from course work during the winter months. Now with many factories putting on extra work shifts, some greensmen are leaving course work before they are released by the clubs. These men, many of them skilled in various trades that have been used to advantage by clubs during depression years, will affect labor costs in golf maintenance. Not only will club payrolls rise, but there will be the added cost of training new, and often less capable, men in golf course work. This cost is at least 10%, on the average, of a workman's first season's wages, and does not include damage done to turf and equipment while being broken in to maintenance routine.

200 Greensmen at Arlington Meet; May Enlarge Event

SECOND annual turf meeting sponsored jointly by the USGA Green Section and the Greenkeeping Superintendents Assn., was held Friday, September 22, at the Arlington turf garden. Over 200 visitors were present, representing golf courses and parks over a large area extending as far west as Iowa, and from New England to Florida in the East. Greater part of the day was spent on the Arlington experimental farm, where the turf investigations are conducted by the Green Section in cooperation with the Bureau of Plant Industry of the U. S. Dept. of Agriculture.

In the morning there was a comprehensive review of all the investigations in progress on the turf garden, including the many selections of bents, bluegrasses, fescues and Bermuda grass; the fertilizer experiments with both bents and bluegrasses; the soil texture experiments; the chemical control of weeds; and the chemical sterilization of soil. There were exhibits of a great variety of grasses used for turf purposes in the various sections of the country; of the seeds of many different grasses and weeds; and of numerous fertilizers. In the afternoon time was allowed for informal discussion groups.

To enhance the general interest of the meeting other investigators at the Arlington farm gave interesting demonstrations of their work. These included exhibitions of dust explosion, of the effect of length of day on the growth and development of plants, and of plastics.

At the noon hour lunch was available on the grounds. Relaxation was furnished at intervals during the day by appropriate competitive sports not soon to be forgotten, such as a relay race in hand weeding and a grass cutting event. In the late afternoon the meeting adjourned to the Capital G&CC, where the experimental greens were rated by each of the visitors and the fairway experimental plots reviewed, after which the meeting closed formally with a dinner in the clubhouse in the evening.

The interest of the visitors was evidenced by the fact that many of them stayed over until the next day and came back to the Arlington farm for a continuation of the discussion of the experimental work there and of their own special problems. The hope has been expressed repeatedly by visitors from various sections of the country that the turf meeting will not only be made an annual event but that it will be expanded into a two-day meeting.

Los Angeles Open Is First of California Tourneys

RETURN of the annual Los Angeles Open golf tournament, established, managed and sponsored by the Los Angeles Junior Chamber of Commerce, to private courses for the next four years at least, has been announced by Clifford L. Rawson, jr., secy.-mgr. of the Junior Chamber. The tournament, which has been held on the Griffith park municipal courses in Los Angeles the past three years, will be played in 1940 over the north course of the Los Angeles CC, Jan. 5-8. In succeeding years the tournament will be played over the courses at the Riviera, Hillcrest and Lakeside country clubs.

Thus, the tournament, for which the Los Angeles Times guarantees the prize money of \$5,000, returns "home" in 1940 inasmuch as the Los Angeles CC was the site of the first annual Los Angeles Open in 1926. The tournament also was played at this club in 1934-5-6. Under the private club system the tournament will revert back to qualifying rounds, with 128 players, and ties, starting the first day's play in the tournament proper.

The Los Angeles Open is the first of the series of tournaments on "California's Golden Golf Trail." The schedule:

Jan. 5-8—Fifteenth annual \$5,000 Los Angeles Open.

Jan. 11-14-\$5,000 Oakland Open.

Jan. 17-21—\$5,000 San Francisco Match play.

Jan. 27-28—\$3,000 Bing Crosby invitational, Del Mar.

If You Need Members . . .

... here is a collection of tested membership campaigns that work. Pick out the ideas that appeal to you, combine them into a well-rounded program, and be all set to SELL before next season starts.

MODERNIZED CLUBHOUSE

Making the club "easy on the eyes" was the successful method used by a West Virginia club to increase its membership. The club employed a good interior decorator, tore out a few eyesores, bought some attractive new furniture, and then, having gotten the clubhouse and course in tiptop shape, held an open house at which time the members brought as many friends as possible out to the club. The club obtained a good list of prospects, and on the following day all of these prospects had heard about the attractive membership proposition that would be open until May 1. Initiation fees would be raised from \$50 to \$100 on that date, the club announced. The plan worked, and diligent follow-up by the membership committee enabled the club to get 38 new members in two weeks time.

THREE FREE PLAYS

ONE Ohio club, to stimulate interest and increase its membership, issued a guest card which permitted a prospect to play the course three times without payment of green-fees. The record of these cards was kept by the club manager, and his report on this method was that the privilege was never abused. The results obtained were more than expected, as considerably over 50% of such prospects made application for membership.

NO DUES FOR A YEAR

WHEN times are tough and clubs are forced to give memberships away without initiation fees rather than lose desirable fellows to other clubs, there's always the danger the 'bargain rate' member will resign rather than pay dues over the winter. The club has no particular hold on him. A membership proposition that has been used by a number of clubs forestalls these post-season resignations. Say the club's dues are \$144 per year, and with the 10% tax added to the total, \$158.40. The club's offer is to take members in the spring for \$150, with \$50 payable on issuance of membership certificate and \$25 a month for four months, no dues becoming payable until a year has passed.

The prospect figures he is getting an

equity in the club for the dues alone (in fact for \$8.40 less.) He is. Meanwhile, the club is satisfied, because it has a new member, and better yet, it has his dues through the winter and until the next spring. A man is not likely to resign from a club at the start of a golf season.

BEGIN YEAR IN MARCH

A MIDWESTERN club took stock of the resignations it had had over a ten-year period, and found that practically all came during January and early February. The club's fiscal year ended December 31. Acting upon a suggestion from a member, the board of governors approved a plan of extending memberships until March 31 of the next year. The result was that resignations were reduced by about 80%. The plan has now been in operation for four years, and the club has found that member resignations have been further reduced during each of the years. A man is not interested in paying golf dues during the winter months, but when it comes time to pay up along about the first of April, enough of the golfing bug is in the air to make him shell out willingly.

BEAR DOWN ON PUBLICITY

A PROMINENT Eastern club, confident that it had as outstanding a course as could be found anywhere in the country, talked up that point so strongly, both in the local newspapers and by every possible spoken method, that they were able to get 75 new members within one season — and without making concessions of any kind to the prospects. The club did, however, make the sports editors of the local papers honorary members, and this accounted for the ample publicity and news items on club activities carried by the papers.

FRIENDLY LETTERS

THE president of an upstate New York club hit upon a smart idea of keeping the membership filled. When a member did not come around for several weeks he figured that whatever was wrong could be righted by showing a little interest in the member. So he took it upon himself to write these members a personal letter, impressing upon them the fact that they had

been missed. Instead of a resignation at the end of the year, it usually meant that the strays came back into the fold and took a renewed interest. When one member is permitted to become dissatisfied, his quitting usually takes two or three others with him.

GOLF LEAGUE

IN quite a few cases, the golf league idea has been responsible for awakening golfing interest in towns where the game had been allowed to run down. The interest in golf that leagues made up of clubs in the district, stimulate, brings back many who have allowed their memberships to expire because of lack of enthusiasm. Publicity given these events, which are usually conducted on a weekly or twice-a-month basis, brings in many new members who find themselves thinking and talking golf, and who were previously not interested in joining any club.

MEMBERSHIP LOTTERY

A PENNSYLVANIA club last winter filled up its membership and its prokept busy during the time the snow was flying—by the simple method of appealing to the gambling spirit of the 'eligible' men of the vicinity. The prowent around the town, which was a lively little place, selling chances on a golf club membership at one dollar a week. Every Sunday afternoon the ticket buyers and the club members met in the lobby of the town hotel and held the drawing. If a fellow's number wasn't drawn before he had paid in \$25, he got a membership anyway. The memberships were at a bargain price for a nice club with a swell pro, and by charging only a dollar a chance, there were no suicides when a fellow's number wasn't drawn.

But here's the important thing. It got 100 new members, and it got the right kind of members—all fellows who were live enough to take a chance and meet and enjoy each other in the winter as well as at the golf club in the summer.

PAY AS YOU PLAY

ONE Pacific Coast club increased its membership by over two hundred members in less than a month. Eighty were former members and the club now has a substantial waiting list. The plan was very simple. Members were dropping out because the monthly dues were getting higher than many could afford. So instead of charging flat monthly dues that would normally be expected to cover most club expenses, the cost per member was broken down into dues to cover capital charges, such as real and personal property taxes, annual indebtedness charge, insurance, depreciation, amortization, etc., which in

the case of this club amounted to a base rate of \$2.50 per month (plus federal tax), and green-fee charges. Each member (and the members of his family if the membership was of the "family membership" type) was charged (or paid cash) a stipulated green-fee for each eighteen holes or part thereof played during the month. Such green-fee charges were set at 25c for 18 holes on weekdays and 50c on Saturdays, Sundays and holidays.

A maximum limitation, however, was placed on the amount any one person could be charged for green-fees. This was set at \$5.50 per month, and no player was billed for any charges in excess of \$5.50. Thus the maximum any member of this particular club paid would be \$5.50, plus the monthly \$2.75 (dues and tax), or a total possible charge of \$8.25. The members were notified of this plan on the first day of October, and were told to call the idea to the attention of their friends, immediately, because the membership limit would be reached shortly. This warning was timely, because the by-law limitation was reached by the 25th of October.

EAST SIDE, WEST SIDE

A DETROIT district club found a very successful way to increase membership was to put into effect the old team competition idea, which in this case meant dividing the locker-room—the east side against the west. Each side appointed a chairman, and a captain was named for each row of lockers. There were ten men to a team and a total of 20 teams all working for new members; the competition was so great that the club had 50 new members within two months.

FAMILY APPEAL

INCREASING a club's family appeal has been, of course, one of the best methods of increasing membership. Perhaps a new swimming pool, which keeps the younger element all pepped up, or some other form of club entertainment that has appeal to all ages, is the thing that brings them in—and keeps them there. There are few better ways of keeping a member sold on his club than to have the members of his own family boosters for it.

ANALYZE PROBLEM

A "TROUBLE - SHOOTER" who has done considerable work at Eastern courses, has the following to say on getting new members:

A membership drive isn't always advisable because it often brings in the briars with the wheat. Instead of a membership drive, why not talk it over with the active members and let each one make a few contacts. They are sure to know

some newcomer in the community; some young man or woman who is just becoming established and needs a club as a recreational and social hub.

How about the club's initiation fee and yearly dues? Even if you tap only the blue-bloods, there is more than a possibility that the ten-year drought has even affected their financial wells. Check on all dues and fees. If they need a revision, go to bat to revise them. Remember, more active members, even if they do have less, mean more for you and the club than a lot of millionaires with arthritis.

Your new member should be more than a name on the roster. See to it yourself that he is having a good time. Not only introduce him to everyone but see that he is thrown in with the old-timers, both on the course and at the club proper. It's your job to be a host as well as a teacher. Arrange for him to be placed on committees, to be given club responsibilities. A good start is 99% of the battle.

DON'T IGNORE YOUNG BLOOD

VETERAN club manager observes A that one of the major causes for club decline and dwindling memberships was the fact that many clubs had an attitude bordering almost on animosity towards the younger members. Foursomes that had played together for years resented the in-trusion of younger blood, and at some clubs, it was with difficulty that younger men got games with the veteran members. But conditions have changed. Age and the depression took toll amongst the oldsters. The younger men kept on and preserved the club. So take heed from this. If yours is a club where the 'youngsters' may yet be given to understand they're intruding, and if conditions at your club demand a larger roster, take heed and don't bar the gates to the kids. Then you'll get well in a hurry.

DINNER MEETINGS

A N exclusive New England club saw its membership drop from about 550 to 250 in a period of two years, but a membership drive in May of last year was so successful that the roster swelled to well over 400. The 102 new members added in the May membership drive brought an increase of club income of about \$10,000 a year, due to the efforts of about 100 members who attended 6 dinner meetings and by those meetings were inspired to go out and make real solicitations. The club got 25 old members to rejoin, but the big gains were made among those men who had stopped playing golf during the height of the depression, and though they were now beginning to get back on their feet, had not yet been inspired to take up golf again. This membership drive took care of that,

HAVE YOU SEEN HIM?



Howard L. Lawrence

The G-Men are looking for this lad, a golfer of considerable ability. They want to talk to him about a hunk of dough he's accused of embezzling from the First National Bank of Danville (Ill.) back in 1932. Have you any tips on his present whereabouts? Maybe he played your golf course this season.

Lawrence is 38, weighs 200, is 6'-1" in height. Dark chestnut hair, thin on top; dark, tanned complexion; gray-blue eyes; teeth in good condition. Suffers from hay fever; may limp slightly with left leg.

If you know anything of Lawrence, J. Edgar Hoover would appreciate your phoning or wiring collect to the Federal Bureau of Investigation, Dep't of Justice, Washington, D. C. Phone: National 7117. Or get in touch with the nearest division of the F.B.I.

The club also found many newcomers in the district who had actually not been invited to join any club.

NO PAID SOLICITORS

HERE'S what a veteran club official in the Chicago district says: It has been my observation that only members can secure worthwhile new members. A club is simply an enlarged family group. No professional solicitor can bring units into this group and keep them there. An older member must help in this process of absorption of the new blood, for the new member expects this social chaperonage. There may be the finest fairways, the sportiest greens, most entrancing scenery and the best cuisine, but unless the recent member is absorbed by a real fellowship, he does not remain.

Berrien Hills CC, Grand Rapids, Mich., uses a bright competitive stunt in adorning its dining room. Members are invited to supply flowers from their gardens to the club. Men and women members vie in making clubhouse tables attractive with specimens from their gardens.

18 GOLFDOM

Water According to Turf's Needs

By John Monteith, Jr.

ONE of the most perplexing details of budgeting is that of watering. Forecasting of water requirements with anything like precision is impossible, of course. However, an acquaintance with the fundamentals of course watering is necessary to insure water use with maximum effectiveness and economy.

According to Welton's figures an average green in summer would require 15,000 gal. per month—or 135,000 for 9 greens. Average rainfall for North Central states, May to September, is 3.42 in., which equals 92,860 gal. per acre. This is approximately the area of 9 greens, therefore a deficit of 42,140 gals. for the season.

For fairways Welton's estimate is 3,500 gals. a day per acre. For 80 acres (18 fairways) 280,000 per day, 8,400,000 per month. Subtracting average rainfall of 92,860 gals., 7,429,280 gals. per 18 fairways per month, you have a deficit of 970,720 gals. per 80 acres of fairway per month. Add the 18 greens and you have the answer to normal requirements in the North Central sector (if the requirements ever are normal).

The old question as to whether greens are watered too much or too little is always most freely discussed in late summer—after the damage from misuse of water has been done. Laudable resolutions to do better next year are forgotten or changed by new officials long before next season is well under way.

No Definite Quotas

Perhaps one of the principal difficulties in settling the watering question is the absence of any specific figures on the amount of water best for greens. Our public is so accustomed to figures in business, politics and general advertising that we have come to look for figures in everything. It is true we may not comprehend the figures and may not recognize when they are juggled before our eyes, but we nevertheless expect to see figures. Therefore when a green-keeper cannot give exact figures for watering his greens he is apt to be scored down at the start of any argument.

A new chairman of the green-committee of a large club expressed this point of view as follows: "It strikes me our greenkeeper like most greenkeepers with whom I have talked, is not sure enough of his maintenance program. I want to work out a definite schedule for our maintenance staff like you find in any modern business organization. It strikes me in this day and age we should be able to get this greenkeeping work down to more definite terms. I want a schedule for our Directors to show just what we are planning to do week by week."

He readily brushed aside any explanation about varying weather conditions and continued: "Take the question of watering greens, for instance. Our greens are a definite size. There must be some definite amount of water which is best for growing grass. By combining such definite figures why can't we give our Directors a definite schedule of watering greens, the first week in August let us say."

It was obvious that arguments were futile so we proposed to work out a definite watering schedule for his selected week as a starter. He, however, was to furnish us with all information that would affect the program. He would gladly do that and an engineer or his committee would gladly check figures dealing with water output.

He was obviously delighted at the prospect of being the pioneer in a new system of "planned greenkeeping." He would jot down the items on which he was to furnish information. 1. water pressure? 2. size of pipe? 3. type of sprinkler? "Yes, our engineer member can double check those." 4. rainfall for July? "Well, yes, that would affect it, wouldn't it." 5. wind velocity and direction for the period? "Well, yes, that also would influence evaporation, wouldn't it." . . . About then a foursome stepped off the eighteenth green and we discussed other matters. This case it must be admitted is extreme. On the other hand it is perhaps not as extreme as it is an obvious one.

Minor Variations Unnoticed

The variations in rainfall that make newspaper headlines are apparent to anyone. However, the average city man pays little or no attention to the usual minor variations from normal rainfall. The extremes between last summer's floods and this season's record-breaking drought in some parts of the East cannot be overlook-



This newly invented Willmore tree mover handles big trees with the greatest of ease. The mover, which was invented by Charles Willmore, of Green Bowers Nursery, near Denver, is shown lifting a large Ponderosa pine on the grounds of the Denver CC, during a recent transplanting job. This machine efficiently moves trees that have earth balls of eight or more feet in diameter, without injuring or disturbing the ball.

ed. On the other hand the difference between a 3-inch monthly rainfall that comes in 2 or 3 quick downpours and an evenly distributed rainfall of 4 or 5 inches is naturally of no particular interest to those who work in offices and is consequently not noticed by them. Therefore, it is not surprising that the greenkeeper and the average club member cannot think of watering in the same terms.

Reasoning Must Back Variation

While varying conditions justify extreme variation in watering schedules there seems to be little excuse for the seemingly aimless application of water that one finds on many courses. Fluctuations in water requirements instead of serving as a justification for no system at all should serve to stimulate a more critical attitude which will develop an even more flexible system based on actual requirements of different greens or even small portions of any green.

Grass is influenced by the amount of water it has available to it rather than by the amount it has received either naturally or artificially. The amount of water that escapes by run-off, drainage, evaporation and transpiration therefore must be considered along with rainfall and sprinkling. This makes it sound complicated, as indeed it is. Fortunately, however, there is an extremely simple way to figure out the effect of these interlocking factors on the availability of water.

The simple method of looking at soil under grass tells the story. Obvious as this

solution may be it is amazing how few greenkeepers ever see the soil under their turf.

After all, grass must get its water from the soil in which its roots are functioning. If the root system is shallow it has a more limited reservoir to draw from than if the roots penetrate several inches deeper. If the soil is examined frequently, especially before watering, it will be possible to avoid many of the injuries from over- or underwatering. Many of the dry spots on greens that are neglected or treated as if they were brown patch will be recognized and may be remedied before severe damage develops.

How to Examine Soil

There are many ways to examine soil for moisture. Americans like special gadgets. A simple and highly efficient sampler may be made in any workshop from a piece of tapered steel tubing. A discarded steel golf shaft serves the purpose well but a tube of the common tubular tined fork will prove somewhat more durable.

A piece of the tubing is cut away as shown in the accompanying illustration. A



short piece at the bottom of the tube left uncut prevents spreading of the sides. The tube is pushed a few inches into the turf and the tapered sides of the tube enables the core to slide up readily inside. The sample can be thrown out of the tube through the side opening for examination. One distinct advantage of this sampler is that the core is so small it need not be replaced and leaves no bad scar due to drying out of larger samples that are replaced after removal with a knife or other sampler.

By frequent use of a sampler a greenkeeper or his watering man can readily detect dry spots in a green. When he takes out cores from which he can readily squeeze out water he is warned that there is too much water for the welfare of his grass.

This sampler may also prove to be a useful way for a green-committee chairman to use some of his discarded shafts. A club of this design for special divot digging purposes would not be counted as exceeding the legal bag limit and it might be handy in convincing some complaining members that just because the surface of a green may look somewhat brown and dry the greenkeeping staff is not really "letting everything burn up."

Here Are Short Course Dates

AS GOLFDOM goes to press, those schools that have announced dates for their annual greenkeeping short courses and turf conferences are Massachusetts State College, Rutgers, Penn State, Michigan State, and Maryland State College. Only tentative dates were given for Md's. course.

Fourteenth annual winter school for greenkeepers at Massachusetts State College, Amherst, is scheduled to get under way January 2 and close with the golf course maintenance conference and exhibition March 14-16. The course is divided into two terms, the first from Jan. 2 through Feb. 6, and the second from Feb. 7 through March 15. The second term continues the work of the first, and certificates are given only at the completion of the full 10 weeks' course. However, one may take the first term in 1940 and the second at some later period, if desired.

Applications for the 1940 course indicate there will be another fine group taking the course. Full information may be obtained by addressing R. H. Verbeck, short course division, MSC, or Prof. Lawrence S. Dickinson, chief of the section of agrostology at MSC, and who is in personal charge of the course.

Penn State College, State College, Pa., will hold its twelfth annual Fine Turf Conference Feb. 21-23. H. B. Musser, associate professor in experimental agronomy at the college, is general chairman of the course, and he is given most capable assistance by Fred Grau, also of the Penn State College staff. Further information may be obtained by writing either Musser or Grau at the college.

Annual turf short course at Rutgers University college of agriculture, New Brunswick, N. J., will be held Feb. 12-17. This is the twelfth annual greens short course held at the school. For applications and further information, write Prof. Frank Helyar, director of resident instruction, Rutgers U., New Brunswick.

Michigan State College, East Lansing, will hold its annual greenkeeping conference March 7-8. Range of subjects to be covered includes nature and properties of soils, suitability of soils to construction and maintenance, fertilization, insect control, turf diseases, and study of various grasses. Write Director of Short Courses, Michigan State College, for further details.

Second annual short course for green-keepers at the University of Maryland, College Park, Md., will be held the latter part of January, probably the last week of the month, according to an announcement. Applications and further information concerning the course can be obtained by writing Prof. Ernest N. Cory, director of course, College Park, Md.

200 Attend Turf Field Day—More than 200 greenkeepers and others interested in the growing of fine turf met on September 13 at the F. H. Woodruff & Sons, Inc. test plots at Milford, Conn., for the annual Woodruff Field Day. C. W. Baker of the Woodruff company led those present in a personally conducted tour of the plots; F. H. Lindley, vice-pres., welcomed the group and told that the company was planning a bulb display next spring at the gardens adjacent to the turf plots that would contain over 150,000 bulbs. A display in the registration tent of various methods of merchandising seed mixtures was of considerable interest to the greensmen.