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THE UNIQUE qualities of natural Chilean Nitrate of Soda make it a most effective and economical topdressing for golf fairways. In fact, with Chilean's help, golf courses have shown vast improvement within a single year. Chilean Nitrate of Soda has proved its value for more than 100 years on farm lands — it will continue to prove its value on your golf course, too.

Guaranteed 42 per cent plant food, Chilean Nitrate is the only natural nitrate. Its nitrogen content is 100 per cent nitrate nitrogen. It's easy to apply . . . flows freely . . . spreads evenly . . . acts quickly and efficiently. It requires only moisture from the air to dissolve—no waiting for rain.

In addition, every ton of *Chilean* Nitrate of Soda contains sodium equivalent to 650 pounds of commercial limestone — an aciddestroying agent.

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Find out about Winged Foot G.C.'s new turf program. Article free on request.

CHILEAN NITRATE of SODA

"Golf and Golf Courses in Canada," Robinson reviewed some of the problems and conditions prevalent in the various Canadian provinces.

Dr. H. B. Couch, of Penn State's Dept. of Botany and Plant Pathology, discussed "Control of Rust on Merion bluegrass." He reviewed work under way testing many new chemicals, some of which have not yet been released for general use.

"Snow Mold Control" was the topic of Dr. James R. Watson, Jr., who reported varying control results of this condition by use of some of the newer organic mercury compounds with various carriers. At the banquet, Dr. Watson paid tribute to his former teacher, Musser.

Seedbed sterilization was discussed by Dr. J. C. Harper, II, of the Lawngrass Development Co., Vienna, Va., followed by a talk on topdressing of putting greens by Dr. J. A. DeFrance, of Rhode Island University. Dr. DeFrance reported on some of the longtime research on lime uses conducted at the Rhode Island station.

Results of 6 different pre-emergence and 6 post-emergence chemicals for control of crabgrass in turf were reported by J. M. Duich, Penn State agronomist. Emphasis was placed on newer materials as well as treatments for various crabgrass species.

Moisture Discussed

Moisture problems occupied a half-day of discussion. Dr. Fred V. Grau, of the West Point (Pa.) Products Co., spoke on "Too Much Water?" followed by Dr. R. R. Davis, of the Ohio Agricultural Experiment Station at Wooster on "An Evaluation of Grasses for Unirrigated Fairways and Lawns" based on research at the Ohio station. Dr. R. E. Engel, of Rutgers University, told of turfgrass problems in New Jersey.

The newer urea-formaldehyde fertilizers were the subjects of two interesting discussions. The first on development and characteristics of the newer materials was by Dr. D. W. Kolterman, of duPont de Nemours Co.; the second by Prof. Musser reported results of experiments on the rates, kinds, and timing of nitrogenous fertilizers, including the urea-formaldehydes. Musser's reports covered five years study at Penn State.

Color slides illustrated the remarks of O. J. Noer of the Milwaukee Sewerage Commission when he spoke on "Experiences in 1955 and Their Impact on Future Turfgrass Maintenance."

Greetings from the U. S. Department of Agriculture were brought by Dr. F. V. Juska, who recently assumed charge of the turf experiments at the Beltsville, Md., research center. Dr. Juska also spoke to the conference on management of mixtures containing the Merion bluegrass.

Turfgrass problems in New York were reviewed by Dr. John R. Cornman, of Cornell University, who declared that Penn State "has the strongest turfgrass program in the nation."

The value of consistent testing of soils in golf courses was stressed by A. E. Cooper, extension agronomist at Penn State, who reviewed the five years' work in this line. Cooper stressed the importance of correcting conditions as reflected by careful soil tests, each year, rather than permitting a buildup of either excesses or deficiencies of the various soil elements.

Numerous speakers during the conference referred to the training of young men in turf work as one of the outstanding contributions made by Penn State during the past 25 years. This point was emphasized in the final talks at the banquet when J. M. Duich saluted 17 men who had received bachelor and advanced degrees specializing in turf work. At the same time, Duich pointed out the growing need for trained men in the field and told how Penn State is attempting to meet this need with a new 2-year program as well as the existing 4year degree program. Many graduates of the school were among those attending the silver jubilee.

Dr. A. L. Patrick, now of the U. S. Soil Conservation Service and former professor of Agronomy at Penn State, related early attempts to focus attention on turf problems when he organized the first turfgrass short courses and conferences 25-years ago. Prof. J. W. White, Professor F. J. Holben, and Prof. W. S. Beach, all retired Penn State faculty members, were present for the anniversary banquet and honored for their respective contributions to the early turf work.

Representatives of a score of Pennsylvania organizations of golf course supts. joined in paying tribute to Penn State and to Prof. Musser during the banquet. Representatives of industries associated with turf work also joined in the testimonial. Alan Mock, Pittsburgh seedsman and pres. of the newly formed Pa. Turfgrass Council, represented that group.

A. M. Radko, Northeast director, spoke for the USGA Green Section, and from the Golf Course Superintendents Assn., Leonard Strong, Bethlehem, Pa. a past president, brought greetings.

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This particular set is in the skillful hands of Lloyd Mangrum, who refers to GLASSHAFT as—"The greatest thing that ever happened to golf"

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For years, golf club manufacturers have recognized the problems of excessive vibration and distortion inherent in steel-shafted clubs. They've known that steel shafts "shiver" and "flutter" at impact—that power is lost through impact vibration—that shaft distortion and resulting club head wobble reduce both distance and accuracy.

Now, COLFCRAFT has found the answer to these basic disadvantages—a shaft made of Patent Pending



the modern miracle material, Fiberglas, laminated to a thin steel core. Vibration and distortion, known spoilers of both accuracy and distance, are virtually eliminated.

Glasshaft Folder Tells the Story

You'll make no mistake by playing and selling GLASSHAFT Clubs. Lloyd Mangrum has called them "the greatest thing that ever happened to golf." One round will show you why. Why not give GLASSHAFT a good display in your shop? Watch the real interest you'll generate. A supply of folders for distribution to your members is yours for the asking.

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Installs New Fixtures – "Enlarges" the Shop

Like many other pros, George Lake of Long Beach had a display problem at his pro shop. Here's how he solved it without knocking out any walls . . .

GEORGE Lake, professional at Recreation Park, the municipal golf course of Long Beach, Calif., is decidedly of the conviction that an important part of the pro's service at any course is selling golfers equipment that will add to their enjoyment of the game and, at the same time, save them money.

at the same time, save them money. Lake always has done a substantial volume of business at his shop. He takes pride in the fact that public golfers of Long Beach long could get golf merchandise and shopping help at his shop that are of the finest private club character. But until recently the shop itself was a small, cut-up affair that had been improved intermittently, but still needed a major operation to give it the attractiveness, convenience and selling power Lake wanted it to have.

The chief element of the improvement is the new backwall fixture and showcases which Lake had installed at a cost of about \$1500. Experts of the Wayell Showcase and Fixture organization of Long Beach, who designed the Virginia CC pro shop and some of the fine store interiors in Los Angeles and Hollywood, planned the Recreation Park shop cases and fixtures after studying the traffic and the other conditions with Lake. The desired results are shown by the photos on these pages.

Below is an over all view of backwall fixtures that occupy space formerly used for a double door that was flanked by windows. The old arrangement was unsightly and didn't do a thing to help display or selling service in the shop. Note the back wall fixture, with return at the right for shoe display, has lighted cornices made of riftsawn white oak and finished light oak. Adjustable shelving is used in the two display areas and peg board in the third for conveniently changing the shoe display. Bargain barrel is in right foreground.





Six and one-half ft. counter at left is partly covered with stainless steel and the balance, by 7/32-in. crystal glass. Shelves also are crystal glass and the interior of the counter is front lighted with fluorescent lights. Drawer or tray, containing balls, is built in directly under the top of counter. It will hold eight doz. balls, packaged in threes. This, according to George Lake (shown making sale), has spurred sales since majority of golfers buy package-of-three balls rather than just one. Wear and tear on counter is avoided by use of the stainless steel cover. Bags and other heavy equipment are passed to customer over this section of counter and it eliminates breakage. Lake's office and storeroom is beyond door at left. The showcase at right, also with crystal glass top, and frontlighted, is used for displaying sport shirts.

Here's a closeup of the Long Beach shop's shoe display. Drawers at bottom contain socks, head mits and additional stock of shirts. Doorway at right leads to starter's cage which is only a short distance from first tee. Golfers can't leave this cage or vestibule to start playing until starter calls their names and gives go-ahead. In foreground (left) gloves are displayed on driftwood tree.

At the Army and Navy Golf Club, New Semesan[®] Turf doubles protection



Teaming up Du Pont turf fungicides proved very effective at the Army and Navy Golf Club for Greens Superintendent James E. Thomas (right) and Greens Chairman Admiral John S. Phillips, U.S.N. Ret. (left). Says Mr. Thomas: "The results obtained in controlling large brown patch and kindred diseases with the combination of new 'Semesan' Turf Fungicide and'Tersan' were very satisfactory. This past season was a trying one for disease in this area, and this new preventive practice proved its worth beyond a doubt."

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Ninth Cornell Conference Attracts 144 Turfmen

By JOHN F. CORNMAN

A total of 144 persons registered for the recent ninth Turf Conference held at Cornell University in Ithaca, N.Y. At the opening session, John A. Naegele of Cornell gave a general summary of insect pests that attack turf and ornamentals. Warren Lafkin of Golf and Lawn Supply Corp., White Plains, showed a 40-minute colored picture on turf problems and turf research. This had been compiled by the Milwaukee Sewage Commission, West Point Lawn Products and Lafkin's firm. Dr. Daniel Roberts of Cornell discussed the increasing interest in nematodes as possible turf pests. He noted reports of damage to Florida turf but said there was little evidence of nematodes damaging turf in the North. However, he pointed out that this lack of evidence does not mean there is no damage. Few specialists are working on the nematode problem so there may be much damage now occurring.

In the afternoon John Gallagher of American Chemical Paint Co. surveyed the weed control field and gave current recommendations for the control of most turf weeds. He paid particular attention to di-sodium methyl arsenate. This very promising chemical has given excellent results under some circumstances and very poor results under others, due in part to differences in moisture and temperature relationships that prevailed at the time of application. More work needs to be done but undoubtedly this material will find a place in crabgrass control.

Gormley Elected President

At the annual meeting of the New York State Turf Assn. Jack Gormley of Wolfert's Roost CC, Albany, was elected pres., and James Strain of the Moon Brook CC, Jamestown, vp. New directors are Robert Dennis of the Wellsville CC, Raymond Twombly of the Wiltwyck CC, Newburgh, and Frank Ruggiero, Stewart AFB, New burgh. George Swanson continues as secytreas.

At the second session Dr. Elliot Roberts of the University of Massachusetts gave a thorough discussion of liquid fertilization. He pointed out the advantages of liquid fertilizers, particularly as they provide more accurate control by the supt. of his turf growth. Frequent applications at light rates are the key to success.

Al Radko, Northeastern Director for the



1956 Officers of New York State Turf Assn. are front row (1 to r): James Strain vp; John Gormley, pres.; and George Swanson, sec.-treas. Second row (1 to r): Directors Robert Dennis, Frank Ruggiero and Raymond Twombly.

USGA Green Section, showed an interesting series of pictures of his observations on trouble-shooting trips throughout the Northeast.

Frank Howard of University of Rhode Island outlined new developments in turf disease control. The use of malachite green to destroy the pythium organism was of particular interest.

In the afternoon session those particularly interested in athletic fields, parks, and lawn problems met for a general discussion of their specific problems under John F. Cornman of Cornell. The golf course and fine turf specialists met under the chairmanship of Al Radko.

At the annual banquet, the main speaker was Prof. C. L. Hosler of Penn. State University. His talk of weather making and weather forecasting was particularly interesting because of his interesting and humorous presentation.

At the final session, A. M. S. Pridham of Cornell spoke on general weed control, with particular emphasis on the use of Alanap for controlling poison ivy and other unwanted vegetation. John Cornman discussed problems that arose in his work on turf areas in New York State and showed illustrations of numerous unhappy circumstances, some caused by weather and some by poor management.

The attendance at this year's conference equalled that of any previous conference. New York State Turf Assn. has undertaken the task of direct sponsorship of future conferences and it is expected that many innovations in the way of exhibits and educational features will be introduced next year.



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J. H. Williams & Co. designed the clubhouse. J. Press Maxwell designed the 45 holes of golf; an 18-hole championship course, 18 holes, interesting but less severe, and a 9-hole par 3 course that's night-lighted. Harry Todd is pro at the big new club. Cary Middlecoff has signed as Riverlake's journeyman pro.

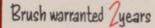
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