Robert A. Moore,
Vice President, Aquatrols Corporation, answers questions most frequently asked about their new product Aqua-Gro.

Q.: Mr. Moore, just exactly what is Aqua-Gro, another soil conditioner, I suppose?

MR. MOORE: No, you might call it a water conditioner. Aqua-Gro works on an entirely different principle. Soil conditioners affect the the structure of the soil. Aqua-Gro, on the other hand, changes the physical properties of water. That's why we say Aqua-Gro makes wetter water.

Q.: Wetter water?

MR. MOORE: Yes, there is such a thing as wetter water. Water from your faucet is held together by what are called intermolecular forces. When you add Aqua-Gro to water it relaxes these forces and the water sort of falls apart.

Q.: That's fine, Mr. Moore, but you still haven't told me what wetter water will do for my greens, tees and fairways.

MR. MOORE: I'm sure you know water and soil just don't mix very well together. One superintendent I talked to referred to the soil in his greens as patchwork quilt. At the time I was unfamiliar with your problems and did not know how well the principle of wetter water would work with the hard spots, thatch, slopes, banks, collars, compacted and hard-to-wet areas. Now, we have the results of tests where Aqua-Gro was used to combat these problems on golf courses last year. They correlate with much that we had observed in our own research. Relaxing water, and making it wetter, does make it possible to control these problems. Wetter water penetrates deeply in all hard-to-wet areas. You get a more uniform distribution and a freer movement of water in the soil. Water logging and overwetness are controlled, provided you have proper subsurface drainage. Deeper root growth is encouraged. Under dry wilt conditions wetter water is more available to the plant roots.

Q.: Some of the fellows say they used this material many years ago, is that right?

MR. MOORE: No, Aqua-Gro is a non-ionic wetting agent. Their use in soils is a recent development. Some work was done with anionic and cationic wetting agents but the results were not consistent.

Q.: Is Aqua-Gro difficult to apply?

MR. MOORE: No, Aqua-Gro mixes readily with water and may be applied through any conventional spray equipment. Aqua-Gro is compatible with fungicides and plant foods. You can apply it at the same time you spray with these.

Q.: Mr. Moore, can these wetting agents do any harm to the soil?

MR. MOORE: No, not at all. Aqua-Gro is an organic material. It actually stimulates the micro-organisms in the soil. If you make Aqua-Gro a permanent part of your year round turf program, it will definitely result in improving your soil.

Superintendents Report After Using AQUA-GRO

"Wetter Water Solved Many Turf Problems"

Effects of Thatch Are Cured
Areas suffering from the effects of thatch are cured by one full treatment of Aqua-Gro. Subsequent waterings percolate freely through the thatched areas. Wet without waterlogging. Aqua-Gro is economical, one application costs approximately 75¢ per 1000 square feet.

Effects of Hard Spots Eliminated
The effects of hard spots on greens are eliminated. Treated water penetrates quickly and deeply into the soil. Uniform water penetration in soils reduces tendency to overwet areas next to hard spots.

Dew Eliminated
Periodic application of Aqua-Gro to greens prevents formation of dew 'round the clock. Fungus growth is discouraged. Costs approximately 20¢ per 1000 square feet. A considerable savings over other methods of dew removal.

Deeper Water Penetration
Plugs of earth from compacted, hard-to-wet areas prove water penetrates up to 600% greater depth if areas are treated with Aqua-Gro. More even distribution of water in the soil results in less frequent watering and better control of turf.

AQUA-GRO COMMERCIAL CONCENTRATE

5-Gallon Pail
Treats 86,000 Sq. Ft.

$60.00 Freight Prepaid

Send for Report X-200 giving research data on use of Aqua-Gro

Aquatrols Corporation of America

March, 1956

Bryn Mawr, Pennsylvania 730 Lancaster Avenue

111
up and maintaining training programs. "It's something we have to live with," Border pointed out. "We're faced with the problem of transiency among our employees. If one leaves, we have to make provision to train a new man. Otherwise, too much of a work load is thrown on those who remain and they, too, start thinking about shopping around for other jobs. On second thought," the San Francisco man added, "proper training gives an employee more confidence in himself and in you. The result is he is more inclined to be loyal to the person who trained him."

Developing Public Relations

Touching on a public relations theme, Tom Dawson, Jr., supt. of the CC of Virginia located in Richmond, told the audience it was up to GCSA members themselves to elevate their profession. "We are not in position to hire experts to beat the drums for us," said Dawson, "and so we have to do it ourselves." How does a supt. go about doing this? Dawson gave these suggestions:

1. Improve press relations. Invite newspapermen out to see the course and explain what you're doing.
2. Offer to give the local newspaper weekly tips on lawn and gardening.
3. Get the greenkeeping dept. into the dub magazine.
4. Don't overlook the chance to speak at club meetings or any other place where you think you can do your profession some good.

Keep Day to Day Records

Budget discussions were headed by Howard Baerwald, LaGrange, Ill. CC supt., who declared that the biggest failure of the supts. lies in not keeping proper and up-to-date records. He suggested putting this stint on a day to day basis, thus obviating the necessity for laboring through recapitulation at the end of the month and taking the chance of overlooking numerous expenditures that should be included in the expense ledger. Baerwald also cautioned his listeners to keep abreast of prices in order to take full advantage of the market and, in addition, not run the risk of being out of funds before the end of the year because too much has been paid for too little.

On Thursday afternoon the greenkeepers visited Meadow Lark GC, Huntington Beach to inspect trial plots and study experiments carried on at that club.

The theme of the final session, held Fri-day morning, was "Progress in Golf Course Management." Alexander Radko, NE director of USGA Green Section's regional service teamed with Charles K. Hallowell, Mid-Atlantic director of the same organization, to discuss fairway renovation. Both men agreed that the supt.'s big job is to sell the idea of renovation to club members. After this is done, cost estimates of carrying out the project may again prove to be a stumbling block. Radko advised that most persuasive renovation selling is started from a "pride in the course" approach. Cost obstacles often can be overcome by either prorating the work or expense over a period of years.

Once the program is undertaken, the supt. has to turn to diplomacy and thought-ful scheduling in order not to seriously aggravate or inconvenience members, Hallowell said. He added that the program should be carried out either in the spring or fall for best results from both an artistic and employers' or members' relations standpoint.

Dr. Marvin H. Ferguson, Southwestern director of the USGA Green Section and Texas A & M faculty member, the next speaker, posed the question: "Is Research Producing Better Turf for Better Golf?" The conclusion was that it is, although Dr. Ferguson conceded that either scientific work on a problem, or its acceptance upon completion, sometimes is or seems unreasonably slow. DDT, he pointed out, was compounded in 1874 but it was 70 years before it was widely used as an insecticide.

Reviews Research's Contribution

Reviewing the turf researcher's contributions to golf in the last 10 years, Dr. Ferguson cited the development or improvement of nine important grass strains as well as the many fertilizers, insecticides, fungicides, herbicides and tools that have been made available to the supt.

As a windup to the speakers' and panel sessions, Bill Willett, Worthington Mower Co., John Norton, Toro Mfg. Corp., and Jim Hoffman, Roseman Mowing Machine Co., gave some interesting, behind-the-scenes information about the mowing equipment manufacturing business. All ventured the prediction that the production of power equipment, which has increased from 100,000 units in 1946 to 2,500,000 in 1955 will continue to grow, and that the greenkeeping fraternity will continue to benefit from many innovations in the design and manufacture of equipment used in turf management.
My greens have shown **AMAZING IMPROVEMENT** since I've started using

**Golden VIGORO**

Complete Lawn Food

says FRANCIS M. COUPE, Greenskeeper,
Washington Golf & Country Club, Arlington, Virginia

"I have particularly noticed more uniform growth, a greener color with no fading and no fear of burning. Golden Vigoro, I'm convinced, is the most outstanding plant food I've ever used on my greens."

Mr. Coupe is one of many greenskeepers and pros who have switched to Golden Vigoro. They find it's tops for economy because one feeding lasts for months! Golden Vigoro has been painstakingly plot-tested, under all conditions, all over the country. There's nothing like it... no watering-in or special care needed. Just ask your Swift Field Representative (or write) for full particulars.

**SWIFT & COMPANY**

Plant Food Division
Union Stock Yards, Chicago 9, Illinois

Pat. No. 2618546, and others pending.
Vigor is a registered trade-mark of Swift & Company
Copyright 1956 Swift & Company
Following this, Charles G. Wilson, agronomist with the Milwaukee Sewerage Commission, summarized the high points of the four-day session.

**Exhibition Wins Plaudits**

On Friday afternoon, GCMA members gathered in the exhibition hall where they had the choice of viewing exhibits and attending discussions covering irrigation, grasses and weeds, disease and insects, and soils and nutrition. Thirty-minute question and answer periods, presided over by experts in these various fields, were an added feature of the displays.

The exhibition phase was run off so smoothly and prompted so much favorable comment that it will undoubtedly become a regular feature of all future national turfgrass meetings. This was the first year the greenskeepers were shown the unique “panel” type exhibition which was given trial runs at earlier meetings of Northern and Southern Calif. Turfgrass Councils.

---

**Course Business Conference**

**At California Recreation Meet**

_by Verne Wickham_

Front line information brought to the conference table by some of the leading golf course men of the Pacific Coast, featured the Golf Course Planning and Operating Clinic held at the annual California Recreation Conference in San Diego, Feb. 12-15.

Herman W. Riece, supt. of Recreation for Kern County, acted as general chairman of the steering committee which arranged the clinic.

Presiding over the opening session Monday morning was R. G. Renfree, Sacramento Director of Recreation and Parks. To the recreation officials numbering nearly 100 in the Balboa Park Club was brought the story of financing methods under the broad title of “How to Get A Golf Course.”

Rex McMorris, vp of the National Golf Foundation set the theme for the entire program by recounting what was going on in golf all over the U. S., telling of the tremendous need for more courses, citing national figures on new course planning and construction and giving data and evidence on this “game of a lifetime.”

Leo Calland, San Diego Park and Recreation, described the long-range plan of using municipal funds to build municipal golf courses; Dr. C. B. Hollingsworth, UCLA Physical Education supt. told the lease plan on municipal lands; John Lewis (Twenty-nine Palms) told his financing experiences and George Mifflin, golf course manager at Taft told how community effort got his community its golf course.

A question and answer period followed the talks.

**Discuss Where to Build**

The afternoon session was titled “Where to Build the Golf Course” and brought golf course architects, maintenance men and supt.s to the speakers table. Americ Hadley, Supv. of Recreation for Golf for Los Angeles, acted as chairman for the afternoon sessions.

Heard in the first afternoon session were William F. Bell, of Pasadena and Jack Daray, of Coronado. Both are members of the American Society of Golf Course Architects and gave tips and advice on where to build the golf course. William Bengeyfield, western director USGA Greens Section, Don Rodvold, Balboa Park and H. E. Coughlin, Los Angeles County golf director, covered maintenance problems in short talks. The entire panel answered questions.

The second half of the afternoon session was entitled “How to Operate the Golf Course.” Heard on this panel were club professionals, course operators and business managers who spoke on starting methods, fund control, value of a good professional to the municipal course, tournaments and promotion. On the panel to bring their operational story to the conference were: Robert H. Hoyt, San Francisco recreation and park dept., Keith Jacobs, Montebello, George Lake, Long Beach and Fred Maheu, San Diego.

**3-Par Growth**

Wednesday morning a session was held on the “Three Par Golf Course” where all phases of short course operation were covered by the speakers. Keith Jacobs acted as chairman. Rex McMorris, of the National Golf Foundation, told of the tremendous growth in this type of course during the last 18 months.

Since there are three general types of operation in the California area, speakers were chosen to represent each of the three types.

R. W. Siler, Recreation Supt. of South Pasadena, spoke on the type of operation there where 35 acres of city-owned land is leased for 50 years to private operators who have built and operate the short course. Mitch Angus, of Casa Colina in San Diego, told of his operation where he and
Pro-Shu Golf Shoes are the golfers' choice. The reason is their correct approach to the footwear requirements of professionals and serious amateurs. Pro-Shu Golf Shoes are built with the accent on lightness. They're a full pound lighter than most golf shoes. In comfort, balance and style Pro-Shu scores again ..., with a heritage of over sixty-five years experience in creating and custom-crafting quality footwear. When you sell Pro-Shu Golf Shoes, you profit with the finest in workmanship and value.

Write today for color catalog and counter display of styles for ladies and men in stock for 1956.

SOLD IN PRO SHOPS THROUGHOUT THE COUNTRY.


*All Pro-Shu Golf Shoes are fully leather lined.

Pro-Shu Golf Shoes are manufactured by HOWARD & FOSTER CO., Inc., Brockton, Mass.
his associates have leased municipal lands and have built and are operating a short course. Burt Anderson, Supt. of Recreation, City of South Gate, told of the municipal type of short course operation, where the city builds and operates the course.

A golf tournament at the newly-opened Singing Hills Golf Course closed the two-day conference.

**WGA Reaffirms Stand Against Gambling**

Following a long established policy, Western Golf Assn. has barred any form of gambling from being connected with its three championships—the Western Open, Amateur and Junior.

“All future WGA tournament contracts shall include the clause that no form of gambling can be connected officially with the championship,” Pres. James T. O’Keefe said. “We have long discouraged Calcuttas and other gambling. No Calcuttas have been conducted during the past six years of WGA tournament play.”

**Midwest Foundation Gets $12,500 for Research Work**

Midwest Regional Turf Foundation recently reported that $12,500 was received in 1955 to further research in turf management. Amounts contributed by various organizations and purposes for which contributions were made, were: American Cyanamid Co., $2400 (Renovation and fertilization); H. F. Godwin & Son, $1000 (Seedhead prevention); Indianapolis Dist. Golf Assn. and Indiana Golf Assn., each $150 (Poa annua control); W. E. Lafkin Co., $750 (General studies); Turf Research Foundation, $4000 (Bluegrass disease, Ph.D. study); USGA Green Section (National Golf Fund), $2000 (Carbohydrates in bent, M.S.A. study); Vineland Chemical Co., $1200 (Crabgrass control); and Woonsocket Color & Chemical Co., $1000 (Nitrogen durability).

In addition, 38 other organizations contributed materials and equipment for experimental work.

**USE BUYER’S SERVICE—PAGE 141**

*for quick information on Equipment and Supplies*
RIPON
KNITTING WORKS
Ripon, Wisconsin
Offering your pro shop
the finest in
GOLF & DRESS
HOSE
for Ladies and Men
with stretch feature that
eliminates inventory problems
80c to $2.25
a pair

GOLFERS KEEP WARM
An 8 ounce, action-free, foul weather garment — stimulates early season sales.
SML - $12; XL - $1 extra

NEW ERA CAP
COMPANY, INC.
Buffalo, N. Y.
Brings 36 years of
cap making experience
to your pro shop
Men's and Ladies'
CAPS and HATS
NEWEST
PERSONALIZED MONOGRAMS
ME and MINE
matching caps
$1.45 to $2.50

PROVEN PRO SHOP SELLERS
RIPON HOSE
RUGBY: MEN'S SWEATERS
SPORT SHIRTS
WILTON: TEE SHIRTS
SPORT SHIRTS
"FOOTLETS" and DRESS SOCKS
LADIES' BOOTIE SOCKS
BARNETT HEAD COVERS
GRIP-TITE WAX
Gates Slip Control
GOLF GLOVES
NEW ERA GOLF CAPS

SEND FOR
1956 CATALOG

March, 1956
1956 Tournament Dates

March
8-11 PENSACOLA OPEN (Club to be announced), Pensacola, Fla.
15-18 ST. PETERSBURG OPEN, Lakewood CC, St. Petersburg, Fla.
22-25 MIAMI BEACH OPEN, Bayshore GC, Miami Beach, Fla.
29-Apr. 1 AZALEA OPEN, Cape Fear CC, Wilmington, N. C.

April
5-8 MASTERS, Augusta, Ga. National GC
12-15 GREENSBORO OPEN, Starmount Forest CC, Greensboro, N. C.
19-22 VIRGINIA BEACH OPEN, Cavalier Yacht & CC, Virginia Beach, Va.
19-22 ARLINGTON OPEN, Hot Springs, Ark. CC.
23-28 NORTH & SOUTH INV., Pinehurst CC, N. C.
26-29 SENIORS INV., Pine Needles CC, Southern Pines, N. C.
26-29 TOURNAMENT of CHAMPIONS, Desert Inn CC, Las Vegas, Nev.

May
2-6 COLONIAL CC, Ft. Worth, Tex.
10-13 CARLINGS OPEN, Sunset CC, Sappington, Mo.
17-20 KANSAS CITY OPEN, Milburn G & CC, Overland Park, Kans.
24-27 & 31-June 3 DALLAS OPEN, Preston Hollow CC, Dallas, Tex.
28-June 2 BRITISH AMATEUR, Troon, England

June
6-10 ROUND ROBIN, Wykagyl CC, New Rochelle, N. Y.
8-9 CURTIS CUP MATCHES, Prince's GC, Sandwich, England
14-16 USGA MEN'S OPEN, Oak Hill CC, Rochester, N. Y.
20-22 WESTERN SENIORS, Highland G & CC, Indianapolis, Ind.
28-July 1 INSURANCE CITY OPEN, Wethersfield CC, Hartford, Conn.

July
2-6 BRITISH OPEN, Royal Liverpool, England
3-8 CANADIAN OPEN, Beaconsfield GC, Montreal, Que.
7-14 USGA PUBLIC LINKS, Harding Park GC, San Francisco.
12-15 LA BATT'S OPEN, Royal Quebec GC, Quebec City, Que.
20-24 PGA CHAMPIONSHIP, Blue Hill GC, Canton, Mass.
26-29 EASTERN Mt. Pleasant GC, Baltimore, Md.

August
2-5 ALL AMERICAN OPEN, Tom O'Shanter CC, Niles, Ill.
8-11 NATL. ASSN of LEFT-HANDED GOLFERS, Catawba CC, Hickory, N. C.
8-11 USGA JUNIOR CHAMPIONSHIP, Taconic GC, Williams College, Williamstown, Mass.
9-12 WORLD CHAMPIONSHIP, Tam O'Shanter CC, Niles, Ill.
16-19 MILLER OPEN, Tripoli CC, Milwaukee
20-25 USGA SENIORS CHAMPIONSHIP, Somerset CC, St. Paul, Minn.
23-26 METROPOLITAN AMATEUR, Century CC, Purchase, N. Y.

September
6-9 RUBBER CITY OPEN, Firestone CC, Akron, Ohio.
13-16 FT. WAYNE (Ind.) OPEN, Elks CC.
10-15 USGA MEN'S AMATEUR, Knollwood CC, Lake Forest, Ill.
17-19 METROPOLITAN OPEN, Inwood CC, N. Y.
11-14 WESTERN OPEN, San Francisco (club not selected).
27-28 AMERICAS CUP, Club Campestre de la Cuidad de Mexico.

Women's Events

March
8-11 TITLEHOLDERS, Augusta, Ga. CC
14-19 NORTH & SOUTH INV. (amateur), Pinehurst, N. C. CC

April
12-15 BEAUMONT, Tex.
19-22 DALLAS OPEN, Preston Hollow CC, Dallas, Tex.

May
10-13 BETSY RAWLS TOURNEY, Spartanburg, S. C.

June
6-10 TRIANGLE ROUND ROBIN, Cavalier Yacht & CC, Virginia Beach, Va.
12-14 WOMEN'S EASTERN (50th anniversary tournament), Nassau CC, Glen Cove, L. I.
21-24 WOLVERINE OPEN, Forest Lake CC, Detroit.
28-July 1 WWGA OPEN, Wakonda Club, Des Moines, la.

July
16-21 WWGA (amateur), Guyan G & CC, Huntington, W. Va.
26-28 USGA WOMEN'S OPEN, Northland CC, Duluth, Minn.

August
2-12 ALL-AMERICAN & World's Championship, Tam O'Shanter CC, Chicago.

September
17-22 USGA WOMEN'S AMATEUR, Meridian Hills, Indianapolis, Ind.

October
8-13 TRANS-MISSISSIPPI, Monterey Peninsula CC, Pebble Beach, Calif.
Soil samples from many golf courses, according to a report at the 1955 Midwest Regional Turf Conference, shows accumulation of phosphorus to the point of excess, with little available potash.

SACCO'S new TUFF-TURF (10-3-7) is "tailor-made" to fit this condition!

TUFF-TURF has more nitrogen and more potash, and enough phosphorus to meet seasonal needs without unnecessary phosphorus build-up.

High-nitrogen TUFF-TURF (1/3 organic) gives grass a quick boost, even in cool weather, plus retained nutrients for uniform growth over a longer period. Even light applications give adequate turf response.

For tougher, healthier turf on greens and fairways, use SACCO TUFF-TURF.

Other SACCO products to meet all golf course needs are:

- **Greens and Fairways mixtures** (high organic base 10-6-4) especially formulated for golf course use.
- **SACCO Plant Food** (4-12-4) for new seedlings, flower beds and general growing.
- **Wedo** (6-10-4 with 2-4-0) a dry, granular, safe-to-use lawn food for areas where weed control is a problem.
- **SACCO Soluble** (18-25-18) a high-analysis water-soluble formula for spray application.

**THE SMITH AGRICULTURAL CHEMICAL CO.**

PLANTS and OFFICES: Columbus, Ohio; Indianapolis, Indiana; Holland, Michigan; Saginaw, Michigan; Carey, Ohio; Argos, Indiana

March, 1956
Keep 1956 on a firmer footing with **MELFLEX**

**HEAVY DUTY MATTING**

Save . . . and be Safer . . . for years to come!

Heavy Duty MEL-ISLE and MEL-FLOK AISLE RUNNERS

Heavy Duty ENTRANCE MATS

MOLDED SAFETY STEP TREADS

SHOWER AND STANDING MATS

Melflex "Factory-Direct" quotations mean economy, too.

Known throughout golf management as the one matting that stands up longest under the toughest of spike shoe traffic — and looks good doing it. It's because the toughest materials available put the "big plus" in Melflex durability.

Safest, too! Heavy duty compounded rubber construction provides non-slip, non-snag surface for maximum safety. Easy to clean. Stay clean longer. No buckle or creep.

Melflex Extra-Duty Driving Mats play best, have surest footing and last longest of all tee mats, say range owners. Melflex Tubular Rubber Tees are tops in durability — $16 per 100. Be your own judge — with a trial order.

Prepare early — write for literature and prices.

**U. S., Canadian Matches to be Held in Ft. Worth**

The fifth annual international PGA team matches between the U. S. and Canada will be held at the Colonial CC, Fort Worth, Tex., on May 7 and 8.

International Golf Assn. annually sponsors the competition in cooperation with the PGA of the United States and PGA of Canada as a part of the IGA's program to develop international goodwill through golf.

This will be the second International PGA Team event to be held in the United States. Last year it was played in La Jolla, Calif. Three previous matches were held in Canada.

Each team will consist of six players and an alternate. The U.S. team is selected by the PGA, which will invite winners on the winter tour. The Canadian team is to be selected by the Canadian PGA.

The teams will play three four-ball 18-hole matches the first day and six singles 18-hole matches the second day, with three points at stake in each match. The winning team will receive the international team matches trophy donated by John Jay Hopkins, chairman of IGA. In the match last year at the La Jolla CC, the U.S. won 17 to 10, to protect an unblemished record in this series.

**New England GCSA Officers**

Michael J. O'Grady was recently elected to head the GCSA of New England for the coming year. Other officers are: Manuel Francis, Albert Allen and N. J. (Tony) Sperandio, vps; William Ash, secy; Arthur Cody, treas.; Ray Brigham, educational committee chmn; Joseph Butler, golf committee chmn; George Rommell and John Kielty, auditors; and 3-year trustee, Daniel Silva.

**Canadian Turf Conference**

The seventh annual turfgrass conference, sponsored by Green Section of the Royal Canadian Golf Assn., will be held Mar. 19-20 at the Ontario Agriculture College, Guelph, Ont.

Prominent speakers who will address the conference include Prof. H. B. Musser, Dr. James Tyson, E. I. Wood, Dr. James Watson, Jr., Dr. O. J. Noer, Dr. J. S. Shoemaker and Prof. R. Goodwin-Wilson.