



The Bull Sheet

Official Bulletin

Midwest Association of Golf Course Superintendents



Walter Fuchs accepts the 1968 President's gavel from Dudley Smith.

JANUARY MEETING

O'HARE INN

JANUARY 15, 1968

ARTICLES :

1. "Why Did He Say That"
2. Landscaping the Teeing Area
3. Gypsum
4. Bagworms

TOM BURROWS, Editor
1648 Prairie
Northbrook, Illinois 60062

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President — Walter H. Fuchs
First Vice-President — Ed Wollenberg
Second Vice-President — Paul N. Voykin
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DIRECTORS

Alfred Bertucci	Harold F. Frederickson
Bertram H. Jannes	Theodore J. Sokolis
Dudley Smith	Richard E. Trevarthan



The President's Message

May I extend my sincere thanks to all members of the Midwest Association of Golf Course Superintendents for their confidence in me by electing me President of the Midwest Association. It will be a privilege to be able to serve in this capacity and I shall serve to the best of my ability.

In many respects the year 1967 has been a very successful one for the Association. The meetings each month were well attended by Superintendents, sales personnel and guests. Each committee carried out their duties well.

It gives me a feeling of satisfaction to note that our membership in the Midwest Association has increased. This means we will be wiser and stronger in many ways.

Many of you will begin the new year with a well earned vacation. The National Convention in San Francisco, California in February will be interesting and educational. Mr. Oscar Miles will be our voting delegate. Let us all support him 100%.

I would like to say that the cover of the September-October 1967 Golf Course Superintendent won the "Best-in-class" award November 3rd from among 72 entries. It won the award in the first photographic competition sponsored by the Industrial Editors Association of Chicago. The cover shows a close-up of a golf ball on a dew covered green at the Park Ridge Country Club. Mr. Gerald Chessman is the Superintendent at the Park Ridge Country Club.

In December your officers and directors selected Committee Chairmen. I hope each member will get behind each committee. Speaking for myself I know that it is a tough job to be Chairman of Arrangements. There were times when I thought we would be holding our meetings somewhere other than at a Golf and Country Club. May I ask all Superintendents to inquire at their club to see if we might be able to visit there and conduct our meeting there.

I hope the year of 1968 will bring you Good Health, Good Luck and Good Fortune.

Walter H. Fuchs,
President



Dear Members,

The Midwest Hospitality room will be open for your enjoyment Sunday evening, February 18, 1968, in San Francisco at the San Francisco Hilton.

H. Frederickson
Ent. Chairman

The 1967 Educational Committee thanks the Fall Turf Clinic speakers and moderators for a job well done.

James Holmes and Robert Williams, moderators.

Mike Bavier, Paul Voykin, Walt Simon, Richard Nugent, Oscar Miles, Ed Wollenburg, Fred Opperman, Ted Woehrle, Richard Craig, Frank Dobie, Tom Gilman, Ted Sokolis — participating superintendents; and Norm Kramer, Toastmaster.

FOR SALE

John Deere Alfacia Drill seeder, 7 foot — 4 inch spacing. Contact Art Clesen, phone LE 7-2177.



With the gavel name plate filled, Dudley Smith, outgoing President, presents the gavel to Ray Gerber, whose name was the first to appear on the gavel.



L. to R. — Harold Frederickson, Robert Williams, chairman, Ray Gerber.

ELECTION FOR 1968

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PRESIDENT — Walter F. Fuchs
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 Theodore J. Sokolis
 Dudley Smith
 Richard E. Trevarthan

The average age of the world's great civilizations has been 200 years. These nations progressed through this sequence:

From Bondage to Spiritual Faith
 From Spiritual Faith to Great Courage
 From Courage to Liberty
 From Liberty to Abundance
 From Abundance to Selfishness
 From Selfishness to Complacency
 From Complacency to Apathy
 From Apathy to Dependency
 From Dependency back again into Bondage

In ten years our United States will be 200 years old.
 This cycle is not inevitable . . .

IT DEPENDS ON YOU!

WHY DID HE SAY THAT?

Dr. W. H. Daniel, Turf Specialist
 Department of Agronomy, Purdue University
 Lafayette, Indiana

(Keynote address for 1967 Midwest Turf Clinic held November 28, 1967, at Medinah Country Club)

As you listen, as you read, as you discuss, ideas are constantly hammered, presented, offered for your consideration. Sometimes it helps to understand "Why Did He Say That?"

Was it a general fact based on many observations, thus the general rule, or was it an exception — unusual, thus so obvious that it caught his attention and he remembered it? It sometimes makes a good story — it proves the rule does not always work.

Was it a well-planned experiment with replicates, with a wide range of treatments so that the limits exceed practical possibility? Or, was it one pot observed one month in one greenhouse for one grass? Thus, Why Did He Say That?

Sometime it is normal. For example, that very knowledgeable man, Dr. O. J. Noer, a few years ago, while talking about building athletic fields said, "Get a good topsoil." Look at the things unsaid. Yet, for the WORDS USED his advice sounded reasonable and pertinent.

Let's look at the ads. Isn't it confusing and amazing to see what is said in ads? For example, there was an ad concerning Zoysia a few years ago that had at most sixteen paragraphs of material, yet it used the name U. S. Department of Agriculture eighteen times. To you and I it was clear they wanted to hide behind the skirts of and let the name U. S. Department of Agriculture help sell their grass through this constant repetition. That is why "he said that 18 times."

Look at the label. Someone said — "My fertilizer is one-shot" and we could question that. What did he say? — That this fertilizer — by carrying that name — would attract attention and supply the nutrients needed by the turf, not for a full year, as might be implied, but until the nitrogen was dissipated. So, we take with a grain of salt some labels, some statements, some facts.

In fact, someone said, "Science is one set of lies after another . . ." for progress is constantly made and facts are re-evaluated, and in this day of short talks — with more knowledge available — it is easy to present something that is "full of hasty generalizations."

Often things become "culture bound." It is the current practice or habit, thus assumed proper, correct and perpetual. It is kind of like fruit Jello — just temporarily put together until the idea gets heated up again. Irrigation is now undergoing such a heating up — so are rootzones. Thatch has already undergone some hot thaws.

A wise experiment should develop into an experience! In summary did he state it as:

1. As general advice
2. As statement of principle
3. As a basic limitation
4. As a habit of expression
5. As a prescription for a situation
6. As a prescription for any — all situations?

Thus, we find considerable reason for getting together, incidentally with an open mind, willing to listen, willing to share, willing to understand both the view and message, for as we understand "Why He Said That" it brings more meaning to you. And, you can better understand "how to apply that."

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Paul Voykin receives the 1967 Charles Barlett Memorial Journalism Trophy for his work on "A Perfect Lawn the Easy Way."

"A PERFECT LAWN THE EASY WAY"

By Paul N. Voykin

Golf Course Superintendent, Briarwood Country Club
Deerfield, Illinois

This is the first time a golf course superintendent has ever written a book on lawn care. The book contains humor and was written strictly for the home owner.

The book is now being published and will be out in March or April, 1968. It will be out and will be revised every four years as new concepts come into view.

There will be 10,000 copies in hard cover and quality paper back. The book will be distributed in book stores and wherever paper backs are sold in the U.S., and the following year in Canada. Paul has all "Book of the Month", Movie and Television rights.

This Cinderella accomplishment came into being when a friend of Paul's gave the first chapter of the book to Bob Cromie, Book editor of the Chicago Tribune and commentator on TV's channel 11. Mr. Cromie liked it so well, he arranged the book to be published by one of the outstanding publishers in the country, Rand-McNally.

PREVENT PESTICIDE ACCIDENTS THIS SPRING

Golf Course Superintendents can prevent accidents with Pesticides if they follow these suggestions from Mr. David Shriver, agricultural chemicals specialist, University of Maryland.

1. Do not misidentify your pest. You may choose the wrong chemical and thus harm yourself and the plant you are trying to protect.
2. Read the label properly and thoroughly.
3. Follow all directions and precautions—including the wearing of respirators and protective clothing.
4. Keep unused pesticide containers under lock and key — and away from children and pets.
5. Avoid breathing dust, mist or vapors. Do not spill liquid concentrates on skin.
6. Cover fish ponds before spraying around this area.
7. Do not fill spray tanks with brackish water.
8. Wash hands before eating or smoking.

From the "Mid Atlantic" news letter.

Now that the irrigation season is over those superintendents who depend on wells for their water supply are reminded that if the well pump has been in service more than 5 years it is always good policy to have it removed for inspection; in areas where the water is corrosive, high in iron content, or where electrolysis exists it will often be found that some of the pump column piping has to be replaced. Even if no replacement of parts is required it is suggested that the column pipe be sand blasted, cleaned, and coated with a protective bitumastic compound.

The cost for pulling and reinstalling a deep well turbine pump with a setting of approximately 250 feet varies from \$500.00 to \$800.00, this is exclusive of the cost for repair parts.

C. E. (Scotty) Stewart

A recent check with C. E. (Scotty) Stewart reveals that he has five golf course irrigation systems under construction at this time; namely Shoreacres G. C., Winnetka G. C., Crystal Lake C. C., Glenwoodie C. C., and Cog Hill G. C. No. 1.



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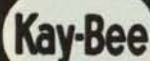
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HOLMES CORNER

by James L. Holmes
USGA Green Section
Mid-Western Agronomist

It's been one turf conference after another since the beginning of October. I definitely have been impressed, this year, with the improved caliber of these conferences.

It was pointedly brought out at the Midwest Clinic that golf course superintendents who currently have automated irrigation are definitely in favor of this relatively new innovation and those who do not have automation are interested in obtaining same.

I thought the talk Frank Dobie, golf course superintendent, Sharon Country Club, Akron, Ohio, gave was especially interesting. To my knowledge, the irrigation system he has installed is the most sophisticated in the northern part of the U.S. Indeed, Frank gave an excellent talk and it was obvious from the audience reaction that we were all impressed. I have attended the Midwest Conference for the past 10 years and this was the most informative yet.

As always, I thoroughly enjoyed visiting with the Minnesota golf course superintendents at their 40th annual turf conference held at the Normandy Hotel. It was a great privilege and pleasure to visit again with my old friend Emil Picha, who is recovering from major surgery. Here again, the highlights of the conference centered around watering systems, with automation receiving the lion's share of interest. Jerry Murphy at Somerset Country Club has recently installed an intriguing system and Dave Streater at Oak Ridge Country Club is currently installing an identical one. I will be interested in observing future results with this type of automation. Dr. Ray Keen from Kansas State University gave an excellent talk regarding soil mixtures for use in putting greens which he followed with a pictorial run-down of a turf trip through Scotland. Dr. Keen would make an excellent speaker for the Midwest program sometime in the future.

A superb talk was given at the University of Illinois by Mike Healy, who has recently earned his Ph.D. degree. Dr. Healy was able to prove that various disease-causing fungi, primarily *Helminthosporium*, *Fusarium* and *Curvularia* were more damaging to fine turfgrasses, namely bentgrass and *Poa annua*, if gutated water which contains glutamine were present on leaf blades. Further, presence of water-soluble

nitrogen in soil is definitely a factor in the production of glutamine. In my opinion, this is just the beginning of this work and more information will be available in the future.

The Wisconsin turf conference centered entirely around the science of soil physics, primarily that of the green. In my opinion, this was an exceptionally sound conference and I am patiently awaiting the conference summary, forthcoming from the Sewerage Commission.

While attending the monthly meeting at Beverly last October, I had the opportunity to discuss the fairway program with Ted Woehrle. The following may be of interest to those who are attempting to encourage bentgrass in fairways:

In 1966, Ted decided he was tired of fighting *Poa annua* and with the sanction of the membership initiated a program whereby various strains of bluegrass were to be encouraged in fairways. Therefore, in August, 1966, he applied calcium arsenate at a rate of 4 pounds per 1000 square feet and drilled-in a mixture which contained 25% Merion bluegrass — 25% Delta bluegrass — 25% Newport bluegrass — 25% Park bluegrass, at a rate of 20 pounds per acre. In mid September, calcium arsenate was again applied at the 4 pounds per 1000 square feet rate and the same seed mixture broadcast-sown. Height of cut was raised to 1 inch and the watering program was adjusted so that fairways were not watered more than 3 times a week with a relatively large amount of water each application. At the inception of this program, Ted estimated that his fairways contained 90% *Poa annua*.

In the spring of 1967, *Poa annua* came on strong but began to fade in June. The Western Open Tournament was to be held later in the summer, so when *Poa annua* began to yellow-off later in the year, Ted spray-applied liquid phosphate as necessary to keep *Poa annua* green. Other than this, phosphorus has been applied at Beverly for the past 6 years. No calcium arsenate was used in early 1967, but it was applied at a rate of 2 pounds per 1000 square feet this fall. Ted reports that calcium arsenate will be used for spot treating, as necessary, in areas where *Poa annua* continues to be a problem.

During the fall of 1966, bent came on strong and continued to spread. This fall, Ted has aerotilled and overseeded with a mixture which contains 90% Merion bluegrass — 10% Seaside bentgrass. In the future, Ted believes he may seed with straight bentgrass. In December, 1967, Ted estimates that fairways at Beverly C. C. are 90% bentgrass.

It would seem that, by and large, we are maintaining for *Poa annua* rather than for bentgrass. But, if frequency of water is reduced and surface drainage is assured and a chemical *Poa annua* control is applied, bentgrass can be grown.

It is of special note here that calcium arsenate can not be used unless surface drainage is rapid. If water lays for any length of time, especially during periods of high heat and humidity, after calcium arsenate has been applied, soil is likely to become sterilized. Ted says he makes it a definite point to bring to the attention of anyone desirous of trying this program that if the surface drainage is not rapid and assured at all times, under no circumstances should calcium arsenate be used. Anyone interested in this type of program should discuss this further with Ted Woehrle.

This year I plan to attend the conference and show in San Francisco and hope to see you all there.

Landscaping the Teeing Area

Walter E. Eickhorst — November 28, 1967
at the Fall Turf Clinic

This listing should be considered as only a partial tabulation of the potential items that might be employed in landscaping the "Teeing Area."

ACER SACCHARUM — Sugar Maple
GINKGO BILOBA — Ginkgo
GYMNOCLADOS DIOICUS — Kentucky Coffee-Tree
FRAXINUS TOMENTOSA — Pumpkin Ash
ACER RUBRUM — Red Maple
QUERCUS PALUSTRIS — Pin Oak
LIRIODENDRON TULIPERA — Tulip-Tree
ACER PLATANOIDES 'EMERALD QUEEN' — Emerald Queen Norway Maple
QUERCUS ROBUR FASTIGIATA — Columnar English Oak
FRAXINUS PENNSYLVANICA SUBINTEGERRIMA 'SUMMIT' — Summit Ash
GLEDITSIA TRIACANTHOS 'IMPERIAL' — Imperial Honeylocust
GLEDITSIA TRIACANTHOS 'Moraine' — Morain Honeylocust
GLEDITSIA TRIACANTHOS 'GREEN GLORY' — Green Glory Honeylocust
ACER RUBRUM 'BOWHALL' Bowhall Red Maple
ACER PLATANOIDES ERECTUM — Erect Norway Maple
PHELLODENDRON AMURENSE — Amur Cork-Tree
MALUS ZUMI CALOCARPA — Zumi Crab
MALUS ARNOLDIANA — Arnold Crab
MALUS 'ADSTRINGENS' — Adstringens Crab
MALUS 'WABISKAW' — Wabiskaw Crab
MALUS 'RED JADE' — Red Jade Crab
MALUS SARGENTII — Sargent Crab
CRATAEGUS PHAENOPYRUM — Washington Hawthorn
CRATAEGUS CRUS-GALLI — Cockspur Hawthorn
AMELANCHIER CANADENSIS — Juneberry
CORNUS ALTERNIFOLIA — Pagoda Dogwood
CLETHRA ALNIFOLIA — Summersweet Clethra
AESCULUS PARVIFLORA — Bottlebrush Buckeye
RIBES ALPINUM PUMILUM — Dwarf Alpine Currant
VIBURNUM OPULUS COMPACTUM — Compact European Highbush Cranberry
POTENTILLA FRUTICOSA 'FARRERI' — Farrer Bush Cinquefoil
SPIRAEA BUMALDA 'ANTHONY WATERER' — Anthony Waterer Spirea
BERBERIS THUNBERGII 'CRIMSON PYGMY' — Crimson Pygmy Barberry
BERBERIS THUNBERGII AUREA — Yellow-leafed Japanese Barberry
EUONYMUS ALATA — Burningbush Euonymus
EUONYMUS ALATA CAMPACTA — Dwarf Burningbush Euonymus
FORSYTHIA 'ARNOLD BRILLIANT' — Arnold Brilliant Goldenbell
FORSYTHIA 'FARRAND' — Beatrix Farrand Goldenbell
HAMAMELIS VIRGINIANA — Common Witchhazel
SYRINGA VULG. 'LUCY BALLET' — French Hybrid Lilac 'Lucy Ballet'
TAXUS CUSPIDATA — Japanese Yew (hedge)
EUONYMUS ALATA — (hedge)

LONICERA 'CLAVEY'S DWARF' — Clavey's Dwarf Honeysuckle (hedge)
BUXUS MICROPHYLLA KOREANA — Korean Littleleaf Boxwood (hedge)
QUERCUS IMBRICARIA — Shingle Oak (hedge)
PINUS DENSIFLORA UMBRACULIFERA — Japanese Umbrella Pine
PINUS SYLVESTRIS FASTIGIATA — Columnar Scotts Pine
PINUS MUGO MUGHUS — Mugo Pine
RHODODENDRON CATAWBIENSE 'ROSEUM ELEGANS'
RHODODENDRON MOLLIS

Gypsum — Where, When and How

by Wallace A. Mitcheltree

Soils under constant use and traffic becomes too compact. Their air space is reduced because the granules break apart and the small particles drop into the pores. A settling and packing thereby occurs. On drying or freezing, regranulation may take place, but the granules are smaller and less resistant to being rebroken than those in well managed soils. Thus the granules in the soils under cultivation break down faster and more completely and they regranulate more slowly. They may finally give up, like a badly exhausted rabbit after a long chase, at that point, a good dose of gypsum may have much the same effect on the soil as an aspirin has on a man with a headache.

In this broken down condition of the soil, air and water cannot get in and air or smoke cannot get out. The rain stands on top of the soil or penetrates only a few inches keeping it cold and wet. Any plant root in such a soil is in much the same position as a man who is trying to smoke a pipe with a plugged stem.

Gypsum provides a granulating mechanism to overcome the difficulty. It give the rabbit its second wind, does away with the headache, and cleans the pipe stem, but, like an aspirin, it is only a temporary treatment until a more permanent remedy can be applied to the basic cause of the trouble.

Low wet spots that are badly puddled and areas that have been tightly compacted by heavy traffic are ideal places to use gypsum. It should be applied at the rate of two tons per acre. So used, the gypsum will often open up the soil and let water through. The best time to apply gypsum is in the fall of the year when freezing and thawing can assist in the job of granulation. It should be scattered over the surface. It does not need to be worked in, it slowly dissolves and gradually moves downward, granulating the soil on its way through, and making for a much improved physical condition, speedier drainage, and better aeration.

— Reprint from Mid Atlantic newsletter.

1967 TURF CLINIC ATTENDANCE

CLASS A —	47
CLASS B —	14
CLASS D —	2
CLASS E —	19
HONORARY —	2
GUESTS —	25



BAGWORMS

by Stan Rachesky

Extension Entomologist, University of Illinois

Identification — In winter, spindle-shaped bags one or two inches long hang from trees and shrubs. In summer, similar but smaller bags may be seen, but the black worm inside moves them from place to place.

Life Cycle and Habits — The overwintering bags contain the eggs that produce a brood of worms in the summer. In southern Illinois these eggs hatch during the latter part of May; in central Illinois, about the first week in June; and in northern Illinois, during the latter part of June. Newly hatched worms may be easily overlooked. On leaving the mother bag, the worms feed on nearby foliage and construct a bag with silken threads and bits of foliage taken from the host plants. Hence the bags on maples look very different from those on arborvitae. The bags enlarge to accommodate the rapidly growing worms; and everywhere the worm goes, the bag goes.

Use one of the following materials:

Lead arsenate, or
 Malathion, 50% to 57% emulsifiable concentrate,
 or
 Malathion, 25% wettable powder, or
 Sevin, 50% wettable powder, or
 Toxaphene, 60% emulsifiable concentrate

It may be necessary to repeat the spraying if rain follows soon after treatment. Sprays applied in late summer after the worms stop feeding or during the winter are not effective. **The worm population, however, can be reduced by picking off and destroying**

In the United States and Canada live 1/15 of the people of the world. They produce:

- 50% of the world's aluminum
- 20% of its iron and steel
- 74% of its uranium
- 48% of its autos, trucks, buses
- 42% of its electric power
- 50% of its wheat
- 50% of its corn
- 42% of its beef and veal
- 35% of its pork

The annual income per capita for the United States is 31 times that of Asia, twice that of Latin America, 5 times that of the world average, and 3 times that of Western Europe.

— From Friendship Press book

Revolutions are made by the poor of the world.

— From Friendship Press book

It is estimated that the teen-agers of the U.S. spent over ten billion dollars in 1963.

— From Friendship Press book

When full grown (in late summer), the worms transform into the pupal or resting stage and later into the adult stage. The wingless and almost legless females stay in the bags, while the black furry males, which have wings, leave the bags and fly about to mate with the females. A female may lay as many as 500 eggs, tamped into the upper part of the bag with scales from her body. After laying eggs, the female dies. There is only one generation a year.

Nature of Injury — Bagworms feed on foliage of evergreens as well as on a wide variety of deciduous trees and shrubs. These plants may be partly or almost completely defoliated. Defoliation of deciduous trees generally does not cause them to die, but a defoliated evergreen is likely to die.

Control — It is important to spray while the worms are small, soon after all eggs have hatched. The larger the worms, the harder they are to kill. To prevent damage to the plants, spraying should be completed in June. The following sprays are recommended for bagworms:

Quantity of material for

<u>1 gallon of water</u>	<u>100 gallons of water</u>
1 tablespoon	4 - 6 lbs.
2 teaspoons	1 qt.
1 tablespoon	4 lb.
1 tablespoon	2 lb.
3 teaspoons	3 pt.

the overwintering bags before the eggs hatch in the spring.

It is usually advisable to supplement lead arsenate, toxaphene, and Sevin with a miticide like Aramite, chlorobenzilate, or Kelthane to control mites.

Caution: Malathion may injure Canaert red cedar.



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San Francisco Appetite

Would you like to eat in San Francisco where the home-towners eat? The October issue of Ford Times recommended a few neighborhood restaurants "just around the corner" from the high cost tourist traps. Depending on your taste, you might try these eateries:

Chinese Food —

SAM WOH'S — 813 Washington Street
(enter through the kitchen and ask for Edsel Ford Fung in the second floor dining room) open until 3:00 a.m.

Mexican Food —

THE TORTOLA — 1237 Polk Street
Francis Scarpulla has been in business 44 years. Offers full dinners for \$3.50, open until 10:00 p.m.

Italian Family Style —

GOOD SPIKE — 527 Columbus
Specialty is Crab Cioppino, open until 10:00 p.m.

Beefeater Room — Canterbury Hotel —

Serves only Prime Rib, Salad, Baked Potato and pastry for \$4.25, including free parking, closes 9:00 p.m.

French Food —

DES ALPES — 732 Broadway
Steamed Clams or Sweetbreads sound good? Dinner for only \$4.00; get there before 9:30 p.m.

Fisherman's Wharf —

SCOMA'S — at the foot of Jones Street
Abalone with macaroni is the specialty for \$3.50, open until midnight.

Perhaps someone's wife would like to slip the recommended list in her purse.

Dudley Smith

1967 BULLSHEET EXPENSES

January	\$398.00
February	227.79
March	229.44
April	336.20
May	238.28
June	243.37
July	238.85
August	213.44
September	268.81
October	234.06
November	246.82

ALCOHOLIC PLANTS

by Paul Voykin — from his 1967 Spring Report

During my vacation in Fort Lauderdale, I conducted some hydro phonic tests with St. Augustine grass, which is the process of growing plants in a water solution. However, I changed the method slightly — Instead of water alone, a couple of shots of alcohol was added to each glass so that one glass contained a solution of scotch, another bourbon, another rum, and so on, the last one being water alone. These were all marked, and placed on the windowsill, much to the delight of other hotel guests. Well, after 10 days it was scientifically found that all survived quite well and expanded a root system as good as the one in water alone, but to the amazement of all, the one with gin and water really broke forth, and had a most amazing healthy white root system — All this proving what?

1967 FALL TURF CLINIC SPEAKERS



L. to R. — Ed Wollenberg, Frank Dobie, Richard Trevarthan, Ted Woehrle.



Howard Baerwald, Dudley Smith.



Ted Sokolis, Oscar Miles, Tom Gilman, Jim Holmes.



Julius Albaugh.



Bog Williams, moderator.



Walter Simon.



Richard Nugent.



Fred Opperman, Richard Craig.