# The new TROPHY... all the basic Cushman features, plus 4 wheels, at a new low cost.

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The Trophy. It has four wheels for greater stability. Automotive type steering for easy handling. Individual bucket seats for comfort. Automatic linecompensating charger. The famous Cushman automatic seat brake for safety—so the car can't move until the driver is seated.

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#### Women in the fore

Someday, somehow there's going to be a sales conference of **pro shop saleswomen** that's going to produce more smart exchanges of successful savvy on buying, inventory control, display and selling than we males in golf merchandising ever thought possible.

One of the first very successful. foresighted businesswomen in pro shops was Mrs. Willie Hunter, widow of the admirable Willie and mother of two fine sons, one of whom, Mac, is a star at making a pro shop an asset for members. When she eased up she was succeeded by another woman business genius in pro shop merchandising, Bobby Cruickshank's daughter Elsie, who was not only a fine golfer but a star at pro shop display, selling and management. When Bobby retired she couldn't get a pro shop job but did get hired quickly and made a success of one of the world-famous Palm Beach women's shops. Another great woman star in pro shop selling is Jack Koennecker's wife Irene. I hate to say it but one time when Harry Adams of MacGregor and I were in their shop at Twin Orchard in the Chicago district talking about the inadequate display of clubs and bags she listened in a politely off-hand way to us while selling more women's golf apparel than Adams and I

thought could be sold in a week.

"Senator" Spencer Murphy, many years pro at Glen Oaks G & CC in the New York Met district told me years ago that he could see the time when a pro who couldn't make a good profit out of having a smart saleswoman in his shop, couldn't consider himself to be in a first-class job at a first-class club. Murphy saw women's buying (for women, men and children) growing rapidly at pro shops. I thought Murphy was balmy then, although he was making considerably more money than most pros. He retired comfortably wealthy. Could be he was just foresighted.

**Eve Bowen**, wife of Kip, the Joyce golf shoe man, with early fashion shows at Professional Golfers Assn. Senior meetings, gave immense impetus to promoting professionals' wives and their women shop assistants in golf merchandising.

This summer, just as before, Government figures on unemployment are high and superintendents can't get men to work on courses and managers can't get enough clubhouse help.

Also handicapping employment and accomplishment programs at golf clubs this summer have been scarce, and confusion exists about hiring high school and college lads on vacation. Minimum wage, hours and fringe benefits have kept kids who want to do the work courses need, but at prices golfers, who are paying for their play, can afford to pay.

The bright spot in the summer course worker picture in several areas is the availability of turf school trainees for responsible, practical work. There are not enough trainees to go around. This summer on-the-job training is going to pay off plenty in dollars in a few years when those lads apply for superintendent positions. Bob Williams, superintendent, Bob O' Link GC, Highland Park, Ill., and former president Golf Course Superintendents Assn., has employed 55 student trainees since he has been a superintendent.

Golf club officials who've had (Continued on page 16)

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A change-over invisible For which I am responsible Is impossible I guess.

Yet somewhere there in golfing land Greens change as if by sleight of hand. No gaping earth ever shows

Where that magic carpet grows. I'd be the hero! Defects zero! No swan-song grass That gasps and dies Right in the noonday sun.

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Greenskeeper's Unite! Have some fun for a change. FUN fertilizer! It'll keep your greens rich in color and growth all season long. Changeovers will hardly be noticeable! Use new WIN™ fertilizer on fairways and your course can look beautiful, year 'round like magic!

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#### Graffis

(Continued from page 12)

profitable experience with the Green Section visiting service say that a complementary expert service of inestimable value are the walk-around tours, comments and recommendations at sectional GCSA meetings. Some visiting superintendents play golf and their observations also are immensely useful.

All these remarks and suggestions of the other superintendents are of practical value for application by the host superintendent. If the host superintendent's chairman and president aren't there to get the other experts' reports the club is out a lot of money and time on work that should be done.

Pros, managers and club officials don't have any investigative services anywhere near the same helpfulness as the superintendents. If club officials were well enough acquainted with what's going on in golf business to be aware of the value of the consulting service of GCSA sectional meetings, each regional organization of superintendents would have far more invitations for meetings than they could handle.

As I recall, the Mid-Atlantic GCSA did the pioneer job with written reports. These reports told frankly what the superintendent was up against and were equally frank in noting what mistakes the host superintendent, like other mortals, might have made.

It took more sense, confidence and courage than is usually seen in business to print those truthful observations.

Miami Valley (Ohio) GCSA now has a walk-around with top ranking experts who are to speak at the evening meeting. The Everglades (Fla.) GCSA with **Lewis Vaughan** as secretary-treasurer rounding up the members, also has a walk-around meeting program of such decided potential value to the budget, the condition of the course and the prestige of the club that club officials who know what it's all about should send engraved invitations.

When Johnny Revolta was

invited by the Italian Golf Assn. to spend several weeks visiting and demonstrating his effective style of instruction to Italian clubs and professionals the invitation was brightly extended by asking Johnny to bring his wife, Lorene, along.

The invitation to Revolta is historic and significant. Tommy Armour and Claude Harmon were invited to go abroad and teach the ruler of Morrocco and a few of his staff. Claude went and did so well he sparked into action a plan to have golf as a tourist attraction in Morrocco, as well as got the Sultan playing a good businessman's game. Japan, Australia and South Africa have had American pros teaching as a sideline to their playing appearances. The playing specialists are, naturally, primarily players and learners for their own needs rather than concerned about the instructional needs of others.

Revolta probably has been the world's busiest golf teacher. Now while he is at the Evanston (III.) GC in summer and Tamarisk CC, Palm Springs, Calif., in the winter, he continues to work with astonishing energy, enthusiasm and results and has long waiting lists on his lesson calendars.

Johnny is an artist. He believes that as golf is played by people the teaching principle is style, rather than method, which is mechanical.

There may be more valuable golf instructors than is realized. The successful golf lesson is a partnership between teacher and learner. With all the research and findings about the technicalities of the swing only recently has there been much organized study of the personalities of the pupils. Successful veteran teachers sensed the relationship that produces good golf. Their reputations were spread by their pupils, for those professionals generally are unselfish fellows who don't care about ballyhoo.

Harvey Penick, for 47 years professional at Austin (Tex.) CC, is rated by numerous men and women pro and amateur stars as one of the nation's outstanding teachers. They can't be kidding because golfers go a long way out of the path to get to Harvey's lesson tee. Now he is easing up on (Continued on page 19)

# Growing zoysia turf in Kansas is a plastic-pipe cinch.

## "Ethyl"6"and 8" Bell: Ring PVC pipe.



Lawrence, Kansas-home of the Alvamar Hills Golf Club-is in a region notoriously difficult for growing stable golf turf. Summers are hot, windy, often humid. Winters are chilly with little snow.

Yet, starting from scratch, Superintendent Mel Anderson was able to build springy zoysia fairways and tees—the first in the region—in less than a year's time. And he credits his good results to precision watering by his Toro Moist-O-Matic irrigation system—installed with "Ethyl" PVC Bell: Ring pipe in sizes through 6".

"We've used galvanized, asbestos cement, other conventional materials, and other PVC pipes. But," he added, "after three years 'Ethyl' Bell: Ring pipe is more maintenance free than any pipe used in the past."

Four years ago, up-to-date irrigation systems began using 6" Bell:Ring PVC pipe with integral bell gasket sealed joints. In 1969, 8" Bell:Ring eliminated the need to use archaic piping materials in modern irrigation systems.

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Functioning as a flexible conduit, "Ethyl" PVC Bell: Ring pipe offers superior flexural strength, which is essential where bad laying conditions are encountered in which some conventional materials break up and shear.

Send for your copy of our illustrated brochure on "Ethyl" PVC Bell:Ring pipe. The irrigation pipe that's a cinch to save you labor, money and headaches.



# **NEW FROM DU PONT**



For Control of Pythium and Snow Mold

**Check these advantages** 

EFFECTIVE CONTROL (thoroughly tested at universities)

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TURF PRO

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NON-MERCURIAL large safety factor on turf

For control of Pythium Blight, spray "Tersan" SP at rate of 4 oz. per 1,000 square feet. Repeat as needed. For control of snow mold (Typhula), spray "Tersan" SP at rate of 6 to 9 oz. per 1,000 square feet. See your Du Pont Turf Products supplier for your "Tersan" SP today.

With any chemical, follow labeling instructions and warnings carefully.

#### Graffis

(Continued from page 16) his pro job and turning it over to his son. He plans to stay on for a limited schedule as teaching pro.

Penick is the sort of an instructor who'd be invaluable to a small club, maybe a vacation or resort club, where the pro shop work wouldn't be heavy. Members would get post-graduate instruction. Those less demanding jobs at smaller vacation clubs have proved to be happy mutual associations for veteran professionals, club members and visitors. Among noted pros who are happy and exceptionally valuable in these smaller jobs are Billy Burke, Henry Picard, Jack Mackie and Bobby Cruickshank.

Four shining champions of yesteryear have developed into outstanding teachers on the Pacific Coast: **Paul Runyan**, **Olin** and **Mortie Dutra** and **Ralph Guldah**l; and they're very active at Grade A clubs.

Robberies of golf course equipment seem to have been far more frequent this year to mid-June than ever before. For instance, **Piqua** (Ohio) CC maintenance building was broken into and \$200 worth of repair tools and a \$1,700 International 14hp Cadet tractor was stolen. **E.J. Sylvester**, the superintendent, says four other small tractors have been stolen within a 25-mile range of the club.

There's been an historic advance in pro golf business with the establishment of the Florida PGA Credit Union. Joe MacDonald, pro at NAS GC in Jacksonville is first president of the Florida Section PGA Credit Union, which will function like other industrial credit unions by banking savings of members and lending at low rates for the personal and business financing needs of members. This is a long, long advance from the old days when a prodessional financing himself in a new job had a credit problem that might not get himself and his suppliers free from buying and job progress problems for years.

Rossville, Ind., opened its new **Angel Hill** GC for its centennial celebration. Eighteen families in Rossville bought the land and by their own muscle and brains built the course . . . **Brown County**, Ind., colonized by noted artists and writers and one of the beautiful sections of the state, finally got itself a golf course.

This year the fourth annual \$250,000 Westchester Classic went over \$1 million as the amount raised for the six participating hospitals. Bill Jennings is chairman and has the help of over 1,000 unpaid volunteer workers selling tickets, driving courtesy cars and selling program ads.

Joe Kenney goes from Braintree, Mass., municipal course to pro job at East Hartford (Conn.) GC where Bill Steill, pro for 35 years, quit, not quite feeling in top condition.

# play through?

Whether your players want to "play through" or we do, your course will be out of play only one fairway at a time when Miller does the installation. Also, when we move on to the next fairway we won't leave the job looking like we did it with "explosives." In our nearly 50 years of experience we've learned to do the job right . . . every time. Our staff is large, and we have the most complete line of specialized construction equipment in our field. We've installed hundreds of sprinkler irrigation systems throughout the midwest . . .

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## The finest greens are planted with Warren' STOLONS

Perfect even texture and color are maintained with clean, pure-strain WARREN'S STOLONS. Greens planted with seed do not hold their uniformity of color and texture as well as greens planted with stolons. They are apt to develop a "patchwork" look after a few years.

The cost of STOLONS over the cost of seed is insignificant compared to the overall cost of the establishment of a golf course. Why be satisfied with anything less than perfect greens only obtainable from purestrain STOLONS.





## Wetting agents are not cure-alls

Effects of nonionic surfactants on monocots. R. M. Endo, J. Letey, N. Valoras and J. F. Osborn. 1969. Agronomy Journal. 61(6): 850-854. (from the Departments of Plant Pathology and Soils and Plant Nutrition, University of California, Riverside, Calif. 92502).

The effects of two nonionic surfactants on seed germination, shoot growth and root growth of six grasses were investigated. The grasses included in the root and shoot growth inhibition study were barley, common bermudagrass, creeping bentgrass, Italian rvegrass, Kentucky bluegrass and tall fescue. Additional studies concerning the effects of surfactants on seed germination were conducted with barley. The two surfactants included in the study were (a) Aqua Gro, 50 per cent polyoxyethylene ester and 50 per cent polyoxythylene ether and (b) Soil Penetrant 3685, polyoxyethelene ethanol.

The root and shoot growth inhibition studies with the six grasses were conducted in a greenhouse using solution culture techniques. The Hoagland's nutrient solution contained treatment concentrations of 0, 3, 6, 12.5, 50, 100, 150, 200 and 400 parts per million (ppm) of the specific nonionic surfactant. Seed germination and shoot growth inhibition studies using barley were conducted on two soil mixtures which were compacted to a bulk density of 1.25 gms/cm<sup>3</sup>. The two soils included were (a) a Krilium-treated Yolo silt loam and (b) a 1-1 mixture of sand and peat. The nonionic surfactants were applied to the soils at concentrations of 0, 330, 1,000, 2,000 and 4,000 ppm. Effects on shoot and root growth were determined 22 days after treatment.

Results of these studies showed no inhibition of root growth, morphology or development by the two nonionic surfactants when applied at rates of 3, 6, and 12 ppm in the solution culture studies. Toxic effects were observed at excessive rates of application ranging from 25 to 400 ppm in the solution culture studies. Soil Penetrant was more toxic than Aqua Gro. Root hair development and growth was particularly sensitive to inhibition by the surfactants at concentrations of 25 ppm or more. Differences in species response to root hair inhibition were also evident with bermudagrass being more susceptible to injury than ryegrass. Complete suppression of root hair formation occurred at 200 ppm. Shoot growth was also inhibited by the nonionic surfactants at rates of 50 ppm or higher. Soil Penetrant was more inhibitory than Aqua Gro as was observed in the case of rooting.

There was a drastic reduction in phytotoxicity to the roots and shoots of barley plants when grown in treated soils rather than in solution cultures. Aqua Gro was less phytotoxic than Soil Penetrant in the soil studies. Phytotoxic effects from Aqua Gro applications were only evident on soils treated at high concentrations of 1,000 ppm or above. The reduced phytotoxicity in soils compared to nutrient solutions is attributed to the absorption of a portion of the surfactant by the soil. The differential in phytotoxicity between the two wetting agents is attributed to Aqua Gro being absorbed to a greater extent than Soil Penetrant. The degree of phytotoxicity also (Continued on page 22)