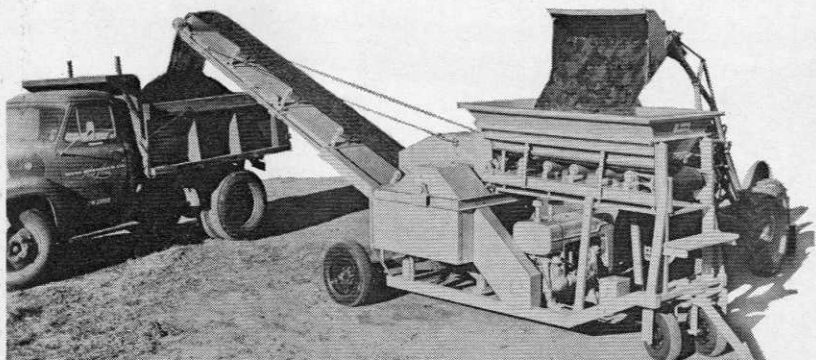


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DIRECT POSITIVE SHREDDING! Lindig Shredders prepare soil materials in volume — *better* with exclusive, positive hi-speed hammer-mill action.

Thoroughly shred, mix and aerate wide range of materials wet or dry. Optional screener attachments are available for preparing stone-free soil materials for top dressing, fine seeding, etc. . . . *a must for fast, uniform spreading with power top dressers.* Lindig shredders process top soil, peat humus, manure and commercial fertilizer mix, compost, sewage sludge-cake and sod.



Model B—Choose from seven models the volume, method of feed and price.



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Want Championship Greens?



Then plant *Warren - STOLONS*
Grown on Sterilized Soil

DEFLOWERED BEFORE SEEDING TIME TO PREVENT CROSS POLLENIZATION

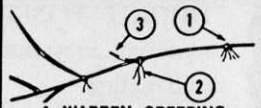
Field sterilization assures purity of strain — prevents *Poa Annua* — eliminates off-strains of Bent — kills weed seeds.

Pure strain foundation stolons grown on sterilized soil result in velvet smooth greens of uniform texture and color.

Our research has shown that when greens are grown with Bent seed, there can literally be hundreds of variations in color and texture from the same seed bag, because of the variability of seed. People illustrate this principle: a dark-haired mother and blond father could have a red-haired child.

When greens are grown from stolons, it is the same individual plants which grow again. Therefore, uniformity is maintained in color and texture of the grass.*

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(1) Node, (2) New Roots,
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Warren's Stolons give more
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Continent within
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Golf course superintendents
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— from Mexico to Canada
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Ask about our new Putting
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Warren' Sod
or
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GCSA May Set New Convention Attendance Mark

GCSA officials aren't going so far out on the limb as to predict that there will be a record turnout for the 35th International Turfgrass conference and show in the Sheraton Hotel in Philadelphia, Feb. 9-14, but they are of the opinion that the attendance record set in Miami in 1962 may be threatened. A heavy draw from the East in addition to the South and Midwest should insure that upwards of 2,000 supts. will be on hand for the six-day program which will feature, as usual, almost four solid days of educational sessions plus a five-day showing of almost every type of equipment and supplies used in the course maintenance business. The Miami attendance record is 2,250.

All educational assemblies will be held in the Sheraton's Grand Ballroom. Here is the program schedule:

Monday, February 10

Morning Session: Invocation, James Brandt, supt., Danville (Ill.) CC.

Welcome to Philadelphia: speaker to be announced.

Keynote speech: Gene C. Nutter, GCSA executive director.

Celebrity speakers: to be announced.

Afternoon session: Theme — Effective Administration. Chairman — Elmer C. Border, supt., El Caballero CC, Tarzana, Calif.

Better Letters — speaker to be announced.

Selling Your Budget — Don Wright, Royal Palm Y & CC, Boca Raton, Fla.

Managing Your Time — speaker to be announced.

Tricks of the Trade — Charles Wilson, Milwaukee Sewerage Commission.

Tuesday

Manufacturers' exhibits open at 9:00 a.m.



Gene Stoddard, Costa Mesa, Calif., Bob Hinkle, Louisville, Ky., and Jim Burton, Greenville, O., made their Philadelphia reservations with Wanda Dodds last year when the GCSA convention was held in San Diego.

Afternoon Session: Theme — Understanding Fertilizer Behavior. Chairman — Beryl S. Taylor, supt., Iowa State U. GC, Ames.

Nitrogen Breakdown — Roy E. Blaser, dept. of Agronomy, Virginia Poly Institute.

Trace Element Deficiencies — James R. Love, dept. of Soils, Wisconsin University.

Other Major Elements — Marvin S. Ferguson, USGA research coordinator.

Quiz of the program speakers.

Wednesday

Entire day will be devoted to business and membership meetings. GCSA officers are to be elected in the evening. Highlight of the day's proceedings will be an explanation of the GCSA's Variable Pension Plan by insurance company representatives.

Thursday

Morning Session: Theme — Our Advancing Profession. Chairman, Fred V. Grau, consulting agronomist, Hercules Powder Co.

History of Maintenance and Equipment (Kodachrome review and narrative) — Michael O'Grady, CC of New Bedford, Mass.

Two-Year Supts' Training Course — Joseph Troll, Stockbridge School of Agriculture, U. of Massachusetts.

Four-Year Supts' Training Course — Joseph M. Duich, dept. of Agronomy, Penn State U.

From College to Career — Sheldon R. Betterly, supt., Chantilly National G/ & CC, Centreville, Va.

Wanted: Golf Course Supts! — Sherwood A. Moore, supt., Winged Foot GC, Mamaroneck, N.Y.

Award to Student Essay Winners — Four prizes totalling \$500 will be awarded to winners of the 1963 essay contest, sponsored by the Golf Course Reporter at the conclusion of this session.

Afternoon Session: Theme — Obligations to the Member. Chairman: Carl W. Nystrom, sec.-treas., Ryan Equipment Co., St. Paul.

Night Maintenance — William A. Lyon, Lyon's Den Par 3, Akron, O.

Attractive Bridges — Gordon Brinkworth, Oaks CC, Rockland, Calif.

Panel on Vandalism, Security and Liability Problems

Vandalism Research — Alex M. Radko, USGA green section;

Security — Alfred E. Hoffman, supt., Ohio State U. GC, Columbus;

Liability — Walter A. Slowinski, GCSA legal consul, member of firm of Baker, McKenzie and Hightower, Washington, D.C.

7:00 p.m. — Annual banquet and show, Grand Ballroom.

Friday

Morning Session: Theme — Pests and Problems. Chairman, Tom Mascaro, West Point (Pa.) Products Corp.

Aquatic Weed Control — John E. Gallagher, Amchem Products, Inc., Ambler, Pa.

Weather and Insects — John C. Shread, dept. of Entomology, U. of Connecticut.

Spring Deadspot — Stan Fredericksen, Mallinckrodt Chemical Works, St. Louis.

Resume of Winter Damage Problems — speaker to be announced.

What Makes Grass Wilt — Harry W. Muesel, supt. Yale University GC, New Haven, Conn.

Pictorial Review of Turf Diseases — Michael P. Britton, dept. of Plant Pathology, U. of Illinois.

Public Course Clinic

On Wednesday, starting at 2 p.m., the GCSA and National Golf Foundation will sponsor a clinic for operators of public courses. Harry C. Eckhoff, the Foundations Eastern director, will serve as chairman of this meeting.

Golfdom Luncheon

Golfdom magazine will be host to supt. fathers and sons and sons-in-law at a luncheon at the GCSA convention. This will be the seventh year that the affair is sponsored by Joe and Herb Graffis. It will be held on Wednesday, Feb 12, at noon in the Pennsylvania East Room of the Sheraton Hotel. Officials and directors of the GCSA also have been invited to attend the luncheon.

The following persons will serve on the clinic panel: William E. McKinney, Silver Spring, Md.; Charles E. Pound, White Plains, N. Y.; Richard A. Sincerbeau, Flint, Mich.; Max Elbin, pro, Burning Tree Club, Bethesda, Md.; Peter McEvoy, owner of Tall Pines GC, Sewell, N. J.; and Arthur F. Loeben, Norristown, Pa. McKinney, Pound, Sincerbeau and Loeben are connected with municipal or county courses in the areas in which they live.

Rules Uniformity Hailed As A Boon to Golf

According to the USGA, there are numerous changes, and, at the same time, a "sameness" in the Rules of Golf for 1964. The new edition of the rules book is available at 25 cents per copy from the United States Golf Association, 40 East 38th St., New York 16, N.Y.

The "sameness" stems from agreement by the Professional Golfers' Association to play by USGA Rules without deviation. Achievement of rules uniformity within the United States for amateur and professionals alike has been hailed by John M. Winters Jr., of Tulsa, Okla., USGA president, as a boon to the game.

The new code was formulated by the USGA after negotiations with the Royal and Ancient Golf Club of St. Andrews, Scotland. The R&A Rules in 1964 will differ from those of the USGA in four particulars.

A number of the USGA changes (as previously announced) concern the putting green, including prohibition of using the flagstick as a backstop, relaxed regulations in repairing ball marks and clarification of procedure when a ball overhangs the hole.

Leonard Strong, retired superintendent of Saucon Valley CC, Bethlehem, Pa., and former GCSA president, recently wrote the following letter to GOLFDOM as publicity chairman of the 35th GCSA National Turf Conference & Show. Leonard's gracious remarks about us are especially appreciated, coming from one of the most dedicated workers for golf and the golf course superintendents.

“ Golfdom has pointed out many, many times the importance of the superintendent to the club . . . It has repeatedly suggested that clubs send their superintendents to the national turf conference every year . . . I am sure that our steady increase in convention attendance and in our GCSA membership is largely due to your publication.

Golfdom has been instrumental in influencing many young men to attend colleges and short courses to study agronomy and golf course maintenance . . . This always has been emphasized at a time when there was a serious shortage of qualified superintendents . . . As a result, our organization, country clubs from coast to coast, and the game itself have reaped the benefit of your diligence in encouraging turf education.

Personally, I have read just about every issue of your magazine since it was first published almost 40 years ago . . . Even though I am retired that is one reading habit I wouldn't change . . . I have gained considerable knowledge from Golfdom, and I can't imagine how you could have kept me better informed through the years of what was going on in the whole golf field . . . Thank you Joe and Herb Graffis for your interest in the course superintendent.”

GCSA leadership has set another new high this year in putting together a conference and show of a caliber that pays tribute to the man selected to publicize it . . . and pays generous dividends to the golf courses that make certain their superintendents attend.

35th International Turf Conference & Show

Sheraton Hotel, Philadelphia February 9-14

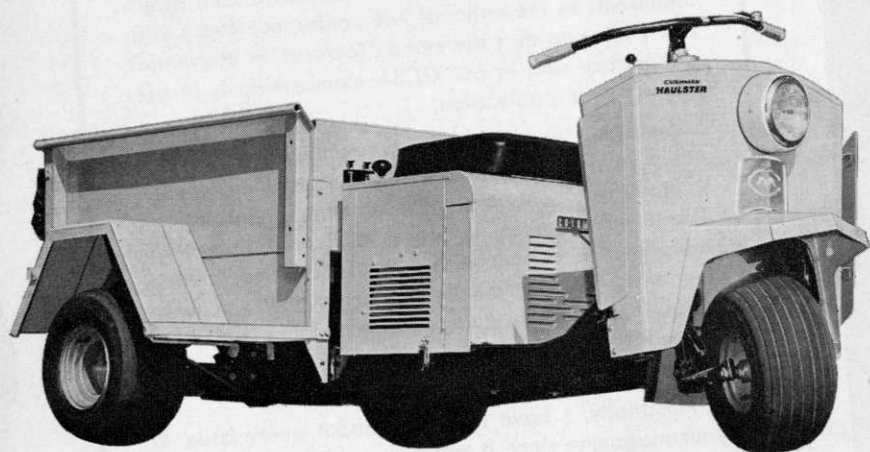
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you can
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NEW! CUSHMAN TURF-TRUCKSTER®

**the multi-purpose grounds maintenance
vehicle for golf courses...developed and made by
Cushman, world leader in golf course transportation!**

This new Turf-Truckster has 18 hp OMC air-cooled engine with 6-speed dual-range drive which gives you the proper speed and power for every job on the turf. Equipped with a variable-speed fast-acting governor this Turf-Truckster responds instantly to any load change. Big 9.50 x 8 Terra Tires on the rear provide great lugging capacity and prevent damage to the turf. Optional power take-off can be used as auxiliary power source for operating accessory equipment such as compressors, generators, sprayers. Stellite valves and rotators insure long engine life.

CUSHMAN TURF-TRUCKSTER HELPS YOU DO ALL THESE JOBS FASTER AND CHEAPER:



SPRAYING. Built especially for spraying greens, this boom sprayer covers 16-foot wide strip thoroughly and evenly, is operated by Truckster engine through power take-off. Boom and spray rig can be removed in minutes.



PULLING MOWERS. Turf-Truckster's terrific lugging capacity gives it all the uses of a tractor. Big tires give plenty of traction, will not damage turf. Variable speed governor insures steady even pull with heavy loads.



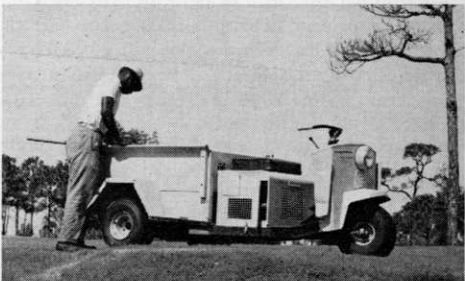
NIGHT WATERING. Load the sprinkler heads into your big Cushman Truckster and start out. Big 9.50 x 8 tires allow Truckster to drive freely, even on wet fairways.



SPREADING FERTILIZER. Truckster's power take-off operates this Cyclone spreader as well as many other power-operated tools. Spreads evenly, heavy or light as you wish.



CARRY GREENS MOWERS. Greens mowers fit easily into large pickup box. There's no time lost between greens; just roll the mowers up into the Truckster bed and go on to the next green.



CHANGING CUPS. Truckster is ideal and economical for moving men and equipment around the golf course. Cup-changing and trap-raking are fast and easy; all the tools are right there in Truckster's big bed!

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Batteries Resist Cold If Prepared For It

If battery driven golf cars, caddy carts and utility vehicles are stored during the winter in buildings where the temperature is below 30 degrees, no harm will result if the building is dry and provides protection against the elements, and if all precautions for battery care are followed closely.

This is the opinion of Marvin T. Elstad, parts and service manager for Toro Manufacturing Corp., Minneapolis. Temperatures in the ideal storage area should range from 30 to 50 degrees, says Elstad, but a fully charged battery can withstand minus 90 degree weather. All lead-acid batteries lose their charge when left standing, but the rate of discharge is higher in warm weather.

Last fall when the cars were stored, Elstad says, vehicle and battery should have been thoroughly cleaned. Batteries themselves should have been thoroughly washed and connections checked for corrosion and looseness. If batteries aren't too far gone it isn't too late to do these things now if they were neglected a couple months ago, but the earlier the servicing of this kind the better.

Handle with Care

If a baking soda solution is used in removing corrosion, says the Toro service manager, care should be taken since the accidental introduction of it into cells can cause damage by neutralizing the electrolyte.

In storing batteries, the specific gravity of the electrolyte should be carefully checked and the batteries charged if necessary. If the water level is low, water should not be added until the batteries have been on charge for about three hours. Adding water before charging can result in an overflow — as the electrolyte warms and gassing begins — and cause corrosion of the battery surface and terminals.

A partially charged battery should never be left standing over extended periods, according to Elstad. During normal discharge, lead sulphate forms on the plates. Though the sulphate is initially soft and can easily be expelled from the plates by immediate charging, it will harden and crystallize if the battery is allowed to remain in a discharged condition. Sulphation makes batteries difficult



Dow Finsterwald (l) has been named head pro at Broadmoor GC, Colorado Springs, Colo., succeeding Ed Dudley, who died last fall. He is shown with William Thayer Tutt, club president. A member of four Ryder Cup teams, Finsterwald has been among the top 10 winners on the PGA circuit six times in the last seven years.

to charge and can result in permanent damage.

During the winter Elstad advises a periodic check of the specific gravity of each battery in order to prevent freezing which can cause buckled plates and permanently damaged cases. "The electrolyte is like the anti-freeze in an automobile radiator," he explains, "the stronger the concentration, the less chance of freezing." It will also keep sulphation at a minimum.

The only problem a mechanic may encounter when using a battery hydrometer to check specific gravity, Elstad says, is that a particular solution will give a different reading at one temperature than at another because sulphuric acid has a different temperature expansion rate than water.

The rule for making the correction is a simple one, Elstad explained. For each 10 degs. F. of acid temperature below 80 degs. F., subtract four points from the hydrometer reading. Add four points for each 10 degs. F. above 80.

Metropolitan Officers

William Dear, Jr., Morris County GC, Morristown, N.J. is the new president of the Metropolitan GA. He succeeds Bertrand Kohlmann of Inwood, N. Y. Other officers are Vincent Ross, Westchester CC, Rye, vp; William W. Schleis, Cherry Valley CC, Garden City, treasurer; and Kenneth T. Gordon, Montclair (N.J.) GC, secretary.

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Yes, Carlon takes the lead by developing a new method of determining the expected performance of plastic pipe in golf course irrigation systems. The Carlon Cycle Rating Method developed exclusively in our laboratory, can tell you the expected performance of plastic pipe based on your own operating conditions.

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MGA Establishes Central Handicapping Service

The Metropolitan Golf Association is establishing a centralized handicapping service to electronically compute and revise the handicaps of golfers of its 198 member clubs in New York, New Jersey and Connecticut. The service is being introduced in time for use during the 1964 golf playing season. The MGA thus becomes the largest district golf association to introduce central control computing as a service to its member clubs.

To provide the latest in electronic computing methods, the MGA has made an agreement to sub-contract the work through Sports Data Corp. of New York. During the past two years this company has been providing electronic handicap computing for a number of clubs in the district.

Points Out Advantages

In announcing the service to its member clubs, the MGA pointed out a number of advantages of centralized handicapping, among them: uniformity of handicapping in the district; elimination of human error in calculation; computation under one method — the official USGA golf handicap system.

Handicap assignments and revisions for the entire district will be made on the same day, seven times each playing season. Clubs conducting member-guest tournaments will be able to verify guests' handicaps through the MGA office which will maintain a master list of all handicaps computed and recorded to the last revision period. Club handicap committees will be relieved of the slow, tedious and troublesome chore of keeping records and computing manually. Computations will be made overnight.

Uniformity Established

With the move toward centralizing handicap computations, the MGA is giving full effect to the USGA golf handicap system, which has as its basic elements, uniformity of course ratings — an evaluation of the playing difficulty of a course compared with other rated courses in the area, which the MGA has followed during the past three years — and a faithful application of the USGA formula of computing handicaps, under a uniform method, from complete and accurate scoring records of all players.

Murphy, Smallwood Win Top Newspaper Writing Awards

Jack Murphy of the San Diego Union and Irwin Smallwood of the Greensboro (N.C.) Daily News were the principal winners of the seventh Brunswick-MacGregor newspaper golf writing competitions, sponsored by the Golf Writers Association.

Murphy won first prize in the feature division with an article on the unscheduled match between Arnold Palmer and a bee that sat on his ball in the 1963 Phoenix Open. Smallwood was singled out for his gripping news writing story of Jack Nicklaus' reaction to missing the cut in last year's Open at Brookline.

Second prize in the feature division went to Bob Drum of the Pittsburgh Press while Ben Garlikov of the Dayton Daily News won the second news reporting prize with his description of Nicklaus' Masters victory. Third place winners were Frank Reece, Dallas Morning News (feature) and Murray Forsvall, Dallas Times Herald (news writing).

Prizes of \$250, \$150 and \$100 were awarded in each division. There was a record list of entries in the 1963 competitions — 158 in the feature division and 81 in the news division. The contests were judged by Jay Jensen, head of the University of Illinois Journalism school, and his staff.

Casper Plays 80 Rounds in 70.58 to Lead Vardon Cup Race

Although Bill Casper, Jr., had to sit on the sidelines for two months during 1963 with an injured hand, he managed to get in enough rounds to qualify as the winner of the Vardon Trophy. His 70.588 strokes per round for 80 rounds gave him a fractional lead over Arnold Palmer, Julius Boros and Tony Lema, all of whom finished under 71. Casper also won the Vardon cup in 1960.

Here is how they finished in the Vardon Trophy competition:

	Rounds	Average
Bill Casper, Jr.	80	70.588
Arnold Palmer	79	70.633
Julius Boros	98	70.735
Tony Lema	103	70.893
Dow Finsterwald	123	71.244
Don January	99	71.343
Gardner Dickinson, Jr.	112	71.464
Art Wall, Jr.	94	71.532
Bruce Crampton	149	71.570
Gene Littler	104	71.712