

#### **Upcoming Events**

- January 6-7, 1986 GCSAA Regional Seminar at Pheasant Run, St. Charles, IL
- January 13, 1986 MAGCS Monthly Meeting at Arrowhead G.C., Wheaton, IL
- January 29 February 5, 1986 57th International Golf Course Conference & Show in San Francisco
- February 11, 1986 Illinois Pesticide Clinic at St Charles, Kane County Extension office, 535 Randall Rd. (General Testing)
- February 13, 1986 Kane County (Turf & Ornamentals Training)
- February 19, 1986 Grayslake General Standards Training 10 a.m. at Lake Co. Coop. Extension office, 33020 N. Highway 45

#### Committee Appointments — 1986

EDUCATION	Chairman:	Bruce Williams
		Jim Evans
		Ray Schmitz
ARRANGEMENTS	Chairman:	Al Fierst
		Mike Nass
		Phil Taylor
GOLF	Chairman:	Sean Daley
		Ray Schmitz
		Al Fierst
		Phil Taylor
		(consultant)
MEMBERSHIP	Chairman:	Phil Taylor
		Dave Meyer
BY-LAWS	Chairman:	Mike Nass
		Joe Williamson
		Ray Schmitz
EMPLOYMENT	Chairman:	David Behrman
		Joe Williamson
		Roger Stewart
FINANCE & PUBLICITY	Chairman:	Jim Evans
		Mike Nass
		Dave Meyer

#### FOR SALE

1970 Toro Super Pro, 5 gang, good condition — \$450.00 Honeybee 60'' rotary mower, good condition — \$400.00 Jari Sickle Bar — like new — \$300.00 2 Jacobsen 26'' Estate mowers, good condition — Best offer Peerless Reel Grinder — Old Ray Gerber Special — this machine has as many years to go as it has on it. If interested, let's talk!

Call Fred Opperman, Glen Oak C.C. (312) 469-6220.

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Kenneth R. Zanzig

#### For Sale

- Royal Power Screen. Model '30'. Like brand new, used 2 times - \$1500.
- Woods Model D-80 Rotary Mower/Mulcher. Very good condition — \$1750.
- Jacobsen Model 590 Fairway Aerifier w/6" Slicing Blades, universal hitch, transport wheels, remote hydraulic lift assembly, individual weight trays — \$1800.

Contact Tim Davis, Shoreacres - 312-234-0323.

#### Looking for an Assistant?

Anthony Brzinski, presently working at Olympia Fields Country Club, B.S. degree in Agronomy, is looking for an Assistant Superintendent position in the Chicagoland area. Phone (312) 754-6023.

#### Congratulations!!

Kathy and Dave Mahoney are the proud parents of a 7 lb. 14 oz. baby boy. David Joseph was born on Nov. 20, 1985 at Edwards Hospital. Kathy and David are resting well at home.

#### 18 Hole Golf Course for Sale

152.7 acres with clubhouse designed by Charles Maddox, Sr. Homesite development potential throughout the course in far Northwest suburbs. Total price - \$2,000,000. Call Jerry Mach 526-9122 for details.

#### Seasonal Employment Opportunity

Pine Meadow Golf Club, Mundelein, Illinois seeks individuals who wish to develop a career in Golf Course Grounds Management, to work as seasonal grounds keepers. Send resume to:

Pine Meadow Golf Club, P. O. Box 387, Mundelein, IL 60060. Attention - Ted Sokolis, Golf Course Supt.

#### Assistant Golf Course Supervisor

Assistant Golf Course Supervisor position available at Bonnie Brook Golf Course. Please send resume no later than January 18, 1986, to David Beno, Supt. of Golf Courses, Waukegan Park District, P. O. Box 708, Waukegan, IL 60079. Any questions, call 312/623-5729.



#### Golf Boom to Continue in 1986; Watson of ASGCA Predicts

Golf course construction and remodeling, which accelerated rapidly during 1985, will continue the upward trend in 1986, according to John Watson, president of the American Society of Golf Course Architects.

Watson noted that "conditions are right for the expansion of the game."

He pointed out that lower interest rates in 1985 were the prime reason for the increased activity by developers, resorts and municipalities.

"The pent-up demand that had not been met for five years because of high interest rates was unleashed in 1985, and that momentum will continue through the next few years," the ASGCA president predicts.

Watson also pointed out that golf is attracting more seniors, women and juniors, and the increasing number of golfers is dictating the need for more courses.

The impact of seniors is found most heavily in the Sun Belt where more executive courses are being built to accommodate players who are not longer able to hit the long ball.

"I feel that today's golf course architect has adapted to the increasingly difficult challenge of designing for a multiplicity of players," Watson added.

"With most new and remodeled courses having a wide range of tees, players of different ability can realize equal challenges from each hole."

Watson said that the remodeling trend of older courses not only will continue, but will accelerate in 1986.

"Courses built more than 25 years ago are outmoded in most cases. Today's high-performance golf clubs and balls enable the better golfers, for whom the hazards were designed, to avoid them and score too well. More to the point, the hazards are now causing the poorer golfers to score higher than they should. Therefore, architects are developing master plans to phase in new tees and greens, reposition bunkers, and add water retention ponds for both aesthetic and preservation purposes."

Watson stated that the Society provides free informational material to those interested in building or remodeling a golf course. Simply write to the American Society of Golf Course Architects, 221 N. LaSalle St., Chicago, IL 60601.

## SUPPORT YOUR ADVERTISERS

#### San Francisco

by Al Meillon, CCM Credit - "Outlook" 9/85

Everybody's favorite City is 45 square miles in size, has 43 hills and a population of some 706,000. The average temperatures range from 45 degrees to 65 degrees farenheit.

San Francisco is laden with so many points of interest and so many things to do that there is something for everyone young and old, tall and short, fat and skinny — you name it!

You'll have fun and enjoy visiting such places as the Palace of Fine Arts, now the home of the Exploratorium and formerly the focal point of the 1915 Pananma Pacific Exhibition, a world's fair commemorating the completion of the Panama Canal. Mission Dolores, the oldest building in the City, founded in 1776 by Spanish missionaries as the fifth in the chain of twenty-one California Missions.

Golden Gate Park, the world's largest man-made park with over 1017 acres of what was previously sand dunes. There you will find lakes, picnic sites, the Steinhart Aquarium, Morrison Planetarium, Strybing Arboretum and Botanical Gardens, the Conservatory of Flowers, Japanese Tea Garden, Asian Art Museum.

Chinatown, the largest oriental community in the Western Hemisphere.

City Hall, one of the country's city, state and federal building complexes.

The Financial District - known as "Wall Street of the West."

At the foot of Market Street along the Embarcadero stands the Ferry building, proud survivor of several earthquakes, built in 1896.

The Transamerica Pyramid built in 1972, the tallest skyscraper in San Francisco.

Fisherman's Wharf — with souvenir shops, crab pots and sidewalk artists.

The shopping and design at Pier 39, — Ghiradelli Square and the Cannery, cleverly combine the old and the new.

Golden Gate Bridge, one of the man-made wonders of the world, officially opened on May 27, 1937.

North Beach — the Italian quarters, inexpensive restaurants, formerly the hotbed of the "Beat" generation's poets, and writers.

Coil Tower crowns Telegraph Hill, visit for a beautiful view of the City and the Bay.

The Presidio, a 1500-acre military garrison beautifully set in a redwood and eucalyptus forest. Home base of the U.S. Army's Sixth Division.

San Francisco Zoo ranks among the top six city zoos in the U.S.

Union Square — downtown S.F. — with all the large department stores you can think of, with every famous designer name.

Not too far from the City you'll be able to visit Carmel by the Sea, Monterey, Pebble Beach, the wine countries of Sonoma and Napa Counties. Across the Bay from the City is Sausalito, Belvedere, Tiburon, Richmond, Oakland and Alameda.

Lake Tahoe, Reno, Big Sur and Yosemite are also well worth the time, and not too far away.

You'll enjoy the night life of the City — all types of nightclubs and neighborhood bars and restaurants.



#### The Role of the Assistant Golf Course Superintendent<sub>1</sub> by Joe Williamson

#### Briar Ridge C.C., Dyer, IN

Before I attempt to explain the role of an assistant golf course superintendent, I think we should define an assistant superintendent. He is a person, male or female, hired by the superintendent to be his right hand. He must be able to take control of the crew in the superintendent's absence. With this in mind, I would like to share with you some personal experience on the assistant's role.

An educated assistant should understand some of the technical aspects of greenkeeping through his college education. He should know how to calibrate spray equipment, understand fertilizer analysis and what each nutrient does within the grass plant, and be able to identify species of trees and shrubs. I feel that identification of trees and shrubs could be a time saving tool. If you have some work to be done in or along a fairway, your description of the area might sound like "go to the number six tee, on the left side, near the large linden and cut up some damaged sod, smooth out in preparation for new sod". A person might look for a linden tree forever if he has no idea what one looks like. Time is money and, in this case, wasted money.

Although book learning is an invaluable asset, the amount of knowledge gained through on-the-job training is also a necessity. Through practical experience, he can get a better understanding of drainage, irrigation, disease identification, and with the enormous popularity of lightweight fairway mowing, different grass cutting patterns.

Understanding drainage comes from learning where all the main tiles are located and where they go to. Having this knowledge, one can have a better understanding of how to drain a wet spot in the middle of the fairway if it occurs.

From an irrigation standpoint, it is very important to know the complete operation of the system. I will never forget the time back in the late 60's when I was an assistant superintendent at Woodmar Country Club when a fairway sprinkler came on in the middle of the afternoon during a club event. The superintendent at the time, Roger LaRochelle, lived in Olympia Fields, which is a 30 minute drive from Woodmar. I lived 3 minutes away. The golf professional, Jim Romar, gave me a call and I promptly came over and was able to get the sprinkler to shut off and everyone was happy. I was able to accomplish this without shutting down the entire system. We were able to go ahead with our evening water program that evening.

Even though many superintendents spray on a preventative program, once in a while disease still creeps in. Many of these diseases are detected in the early morning through irregular dew patterns. Not only should he be able to identify disease, but how to get rid of it. If the superintendent decides to take a Sunday off to be with his family, and the weather is hot and humid, the assistant should be alert and, if disease occurs, spray at the curative rate to rid the infected area of the disease.

Those clubs that practice lightweight fairway mowing, the assistant should understand why you cut in different directions, the speed the cutting unit should travel, where and how the clippings will be disposed of, and the frequency of cut.

The biggest hurdle I feel the assistant has to overcome is communication. Many times as assistant will start a job that has older employees on the crew that have been there for a few years. The assistant must be accepted by the crew and at the same time be able to get work out of them when the superintendent is not on the job. He should delegate jobs in a professional manner when required. He should be a listener as well as help the crew members when they need help.

From an educational standpoint, the assistant should be encouraged to attend as many local seminars as he possibly can. The Midwest Clinic sponsored by the MAGCS gives the superintendent a chance to share some personal experiences with his peers. In many cases, good ideas are brought up and taken home by fellow superintendents and assistants.

The North Central Turfgrass Exposition, which is sponsored by the University of Illinois, MAGCS, and Central Illinois Superintendents, brings not only superintendents, but college professors together to share ideas and research work. This year, the NCTE will be held in Peoria, Illinois in early December.

The Midwest Regional Turf Foundation (Purdue Conference) is held in early March. The format is basically the same as the NCTE. Many professors as well as superintendents share thoughts and ideas on turfgrass management and care. Dr. W. H. Daniel, who for the past 35 years has organized this conference has retired in April of 1985, however I can assure you that this conference will continue to grow and be a valuable place to learn about all the latest research being conducted throughout the Midwest.

All three of the above mentioned conferences should be attended by assistant superintendents as well as superintendents not only to learn about what is new, but refresh our knowledge in many areas.

In summary, the assistant is the superintendent's right hand man. He should learn as much as he can from his on-the-job experience. He should be encouraged to attend as many educational seminars as he can possibly attend. Through hard work and his desire to continue to learn turfgrass management, every assistant should strive to become a successful superintendent

#### Syringing Effects on the Canopy Temperatures of Bentgrass Greens by J.M. DiPaola, 1984

#### Agronomy Journal, Vol. 76, Number 6, pg. 951-953

Syringing of fine turf, particularly bentgrass golf greens, is practiced throughout the United States. The practical utility of syringing for canopy temperature reduction under the warm, humid conditions of the southeastern United States was examined on a Penncross creeping bentgrass green contructed to U.S. Golf Association specifications. In the absence of wilt, bentgrass canopy temperatures were not altered one hour after syringing regardless of the volume of water or timing of the syringing application. Therefore, in the absence of wilt, the routine syringing of bentgrass greens must be reevaluated given the substantial economic cost of this procedure, particularly for labor and water.

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#### Late-Season Nitrogen Fertilization

#### by John R. Street, Ph.D. Associate Professor, Ohio State University

It has been pointed out that heavy nitrogen fertilization during the spring and summer is undesirable for cool-season turfgrasses. Nitrogen fertilization has proven beneficial during the late fall (late season) on cool-season turfgrasses (Powell, Blazer and Schmidt). Decreased disease, improved stress tolerance and increased rhizome and root growth are among several of the claimed advantages to the "late-season" nitrogen fertilization program. The late-season program is based on differences in optimum temperatures that exist between (1) root-rhizome growth versus shoot growth and (2) photosynthesis versus respiration.

Shoot and root growth of cool-season turfgrasses occur most readily in the temperature ranges of 60-70°F and 50-65°F, respectively. Root growth of cool-season grasses will continue at soil temperatures close to freezing (Koski, 1983). Shoot growth will cease at higher temperatures than that for root growth. Late-season nitrogen fertilization capitalizes on this differential. Under late-season fertilization, nitrogen applications should be made when vertical shoot growth has stopped, but the turf leaves are still green to produce carbohydrates via photosynthesis. Air temperatures of 45-50°C are usually necessary for vertical shoot growth stoppage. It is important to understand that since temperatures will be at a point causing stoppage of topgrowth, roots, rhizomes and stolons will capitalize on any applied nitrogen. The carbohydrate produced will be more efficiently used for root, rhizome and stolon growth during the late fall and winter periods. It is critical that the nitrogen be applied prior to dormancy for maximum efficiency of applied nitrogen. Once the tissue has turned brown, photosynthesis will no longer occur. "Late-season" fertilization is not dormant fertilization.

During late fall, photosynthesis is higher than respiration for cool-season grasses. With green tissue, photosynthesis will occur readily at low temperatures. The high net photosynthesis during late season leads to maximum carbohydrate production and carbohydrate storage for reserves. The positive carbohydrate balance favors root and rhizome growth over topgrowth since air temperatures are well below that considered optimum for shoot growth.

Nitrogen applications during the late season if timed properly will extend the green of the turf later into the fall and winter. Spring green-up will normally occur earlier. The green turf is photosynthetically active favoring a positive carbohydrate balance. Late-season nitrogen fertilization increases the "green growing" period of the turfgrass plant later into the fall and earlier in the spring. Physiologically, this is a positive agronomic practice.

The most efficient nitrogen fertilizers for use in late-season fertilizaton programs are those independent of temperature for nitrogen release. Soil temperatures and microbial activity are low at this time of year resulting in less efficiency from methylene urea and other temperature-dependent fertilizers. Urea and IBDU are fertilizers that are independent of temperature for nitrogen release and therefore, make for excellent late-season nitrogen sources. IBDU, having a slowrelease characteristic, will not cause surge growth even if misap-

(cont'd. on page 17)

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(Late Season Fertilization cont'd.)

plied (e.g. too early) in the late-season program. Nitrogen is a key component of turfgrass fertilization programs. It has an influence on both the morphology and physiology of the turf plant. High quality turf exhibiting acceptable green color and density requires periodic applications of nitrogen. Nitrogen, however, is frequently referred to as the "TNT" of turfgrass fertilizations programs. It can be as detrimental as beneficial if it is mismanaged. Physiologically, the turf manager must maintain a good carbohydrate reserve. Proper timing and rate of application are important in successful long-term programs. Always remember: greener is not always better. A happy medium must be reached between agronomics and aesthetics.

Credit: Patch of Green Nov./Dec. '85

#### Add-On Electronic Ignition System ... And It's Retrofittable

Mower starting problems most likely center on the ignition breaker points. To help avoid this problem, there is now available, from Briggs & Stratton Corp., an add-on electronic ignition system that replaces points, condenser and distributor cam, where problems can occur. The new system, called Magnetron<sup>®</sup>, produces a hotter, more reliable spark and replaces an engine's breaker points and condenser with a tiny, transistorized module.

The system can be retrofitted on virtually all of the company's engines manufactured since 1963.

The module is sealed in a plastic capsule which eliminates common problems associated with breaker point systems — dirt, water and oil that can gradually short out or corrode the ignition system. Best of all, once the unit is installed, it needs no maintenance or adjustments, which, over the life of an engine can save hours of down time.

Electrically, the Magnetron replaces old components, but physically none of the old parts need to be removed. In most cases the system can be installed in 30 to 45 minutes, according to the company.

The first step, is a test procedure to make sure the engines stop switch works properly. This insures that the engine won't start accidentally.

The tools needed to complete installation are: a screwdriver, slip joint pliers and a flywheel holder.

Initially, the blower housing must be removed. Next, the rewind mechanism must be taken off. The next task is wiring the Magnetron module to the ignition system. First, insert the armature primary wire (and stop switch wire, if needed) into the module terminal (see drawing). Next, solder the wire ends together. A spring loaded catch, incorporated in the system, holds the wire ends securely in place while you solder.

Next, twist the long module ground and armature ground together, solder the joint, cut off the shorter end with a wire cutter or scissors. These wires should be glued to the coil with Permatex #2 sealer to protect from vibration.

To test the new ignition system simply pull the starter rope, or turn ignition key.

A detailed instruction sheet is provided in the Magnetron kit. For more information, contact the Briggs & Stratton Corporation, P. O. Box 702, Milwaukee, WI 53201.

Credit: Divot News 7/84

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#### Putting Your Christmas Tree to Good Use by James A. Fizzell

Sr. Ext. Adviser, Horticulture, U. of I.

It is always a melancholy time when the excitement of the Holidays is over and the tree is taken down. Most of us hate to just throw out the tree that has provided so much enjoyment.

The one thing you should not do with the old tree, is to burn it in the fireplace. A dry tree will burn with intense heat and may buckle a steel fireplace, crack a flue in a brick chimney, or could start a chimney fire. If anything, use the small twigs for kindling, he suggests.

An old tradition dating to the middle ages is to move the tree outside and set it up for the animals, decorated with various kinds of foods.

Bird will appreciate suet cakes with seeds, strings of popcorn or cranberries and fresh pine cones with seeds still inside.

Squirrels will appreciate strings of peanuts or apple slices.

During inclement weather the tree can provide protection to animals who will roost in it or huddle under it as long as the storm persists.

Birds such as cardinals and jays, which stay here all year, are much more likely to take permanent residence in your yard if invited there for the winter.

If you are already providing for the animals, there are other ways the old tree can be put to good use.

For areas such as ours where there is always the danger of alternate freezing and thawing, perennials should be covered, not to keep them warm, but to keep them cold. For this reason you always need to wait to mulch the garden until after the ground has frozen. The ideal mulch is light enough to permit air to penetrate, but substantial enough to shade the soil and keep it from thawing every time the sun shines on it.

A good mulch to use for this purpose, easily available after Christmas, is your left over Christmas tree. Branches from your tree can be cut up and laid over your perennial bed. Two layers of boughs, crisscrossed, should suffice. They admit air to the ground, but keep out the sun.

In the spring, remove the boughs in two stages, three or four days apart just as the first new sprouts appear. This permits the tender new growth to become gradually acclimated to the still chilly spring air.

If you have extensive perennial beds or strawberries, you might run out of branches from your own tree. But you can be sure there will a ready supply as neighbors discard their trees.

After removing the branches, save the trunks. They make good bean poles or tomato stakes.

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