

Fairway Mowing Questionnaire

Today with so many people mowing their fairways with light weight units and still so many others who are not but may be thinking of doing so, I thought that a questionnaire would help answer the many questions that arise. I would like all of you who are mowing with light weight equipment to take the time to answer the following questions and then send this page to me. I will compile the answers and in another issue run the results.

1. What machines are you using? _____
2. How many machines are you using to mow fairways? (You may have 4, but only use 3) _____
3. Diesel or Gas (circle)
4. Number of cutting units the machine has: _____
5. Type of cutting unit: Floating head or fixed? (circle)
6. Number of blades in reel? _____
7. Roller type? Wiehle, full roller, swedged (circle)
8. Do you weigh the cutting units? ☐Yes ☐No
9. Number of manhours to cut one acre of fairway? _____
10. Number of acres of fairways that you mow? _____
11. How often does a fairway get cut? _____
12. How many machines do you use when mowing fairways? _____
13. Are these machines used to also mow other areas, such as tees? ☐Yes ☐No
14. What height of cut do you mow your fairways? _____
15. Do you collect clippings? ☐Yes ☐No
If yes, do you do it at all times? ☐Yes ☐No
If no, when do you not? _____
16. If you collect clippings — how do you dispose of them? Spread in roughs, haul to dumpster, haul to dump (circle)
other: _____
17. If you collect clippings, what equipment do you use to dispose of them? _____
18. What is your cost of disposal? Weekly _____ Monthly _____
19. About how many manhours does your mechanic need per week to service and repair these units? _____
20. How many extra cutting units/reels do you have on hand as spares? _____
21. What were your start up costs to go to light weight mowing? _____
22. What machine would you change to today for mowing your fairways if budget was no object. _____
Why? _____

Please return to: Fred Opperman, Editor, 1022 Shady Lane, Glen Ellyn, IL 60137

Please return by: October 20, 1987

NOR-AM INTRODUCES
Turcam 2½G
 INSECTICIDE

ALL THE ADVANTAGES OF TURCAM
 IN A
 CONVENIENT GRANULAR FORMULATION



- FAST ACTING
- GOOD RESIDUAL
- DOESN'T TIE UP IN THATCH
- EASIER TO APPLY
- ADVANCED CARBAMATE CHEMISTRY
- COST EFFECTIVE

Now available in 40-lb. bags

IMPORTANT: Please remember always to read and follow carefully all label directions when applying any chemical.

NOR-AM
 NOR-AM CHEMICAL COMPANY
 1001 Silverdale Road P.O. Box 305
 Wilmington, DE 19803

John M. Turner
 Sales Representative
 Specialty Chemicals Group
 (312) 442-1866

MAGCS Seeks 1988 Monthly Meeting Sites

The Midwest Association of Golf Course Superintendents, through its Arrangements Committee, is in the process of establishing a tentative monthly meeting schedule for the next year, 1988. It is, once again, our goal to arrange a geographically balanced schedule with a variety of golf courses for all MAGCS members to enjoy. If you are interested in offering your time and your club or facility for such an event; complete, clip and return the form below to:

Bruce R. Williams CGCS
 Bob O'Link Golf Club
 1120 Crofton Ave.
 Highland Park, IL 60035

I am interested in hosting a 1988 MAGCS monthly meeting:

NAME _____

CLUB _____

ADDRESS _____

CITY _____

STATE _____ ZIP _____

Specific month for meeting date (if preferred) _____



MOTOROLA IRRIGATION CONTROLS

*State of the Art
 Irrigation Management*



MOTOROLA
ELECTRONICS

*Guaranteed
 Reliability*

Local Service & Backup

*Ask the
 Superintendent
 who **OWNS ONE***

Distributed By:

SHEMIN IRRIGATION DIV.
 Addison, Illinois (312) 773-8090

PRECISION BLENDED TOP DRESSING

Custom blended to your specifications
 by our modern equipment.

*Buy when you need —
 Eliminate costly storage*

We sell an air-dried, uniform and
 free flowing top dressing.

ASK THE MAN WHO HAS USED IT.

HUMUS — BLACK SOIL

HENRY FRENZER

Area Code 312
 658-5303

620 Webster St.
 Algonquin, IL
 60102

Midwest Breezes



Upcoming Events — Mark Your Calendar

October 8 — MAGCS meeting at Woodstock C.C.

October 23 — Dinner Dance at Riverside G.C.

October 28 & 29 — The Wisconsin Golf Turf Symposium
Contact: Bob Welch (414) 225-2222

November 4 — MAGCS Annual Meeting at Cyprus Inn

November 9-11 — Penn State Turf Conference

December 8-10 — NCTE at Pheasant Run, St. Charles, IL

“Classical Season”

Oktoberfest — The Joy of it all,
Seen another Summer turn into Fall.
Have another Bratwurst, enjoy another Beer,
A Classical Season's Ending is near.
While Summer's Heat was taken,
By most, “Tongue in check”,
Many were deluged with heavy rains,
And overflowing Salt Creek.

Kenneth R. Zanzig

I guess I should really know better by this time than to expect people (no, not people, but golf course superintendents) to really send me photos and news items of what is happening. Last month as we went to press the Chicago area was hit by severe flooding and I had asked for photos and stories of how hard hit the courses were by the flooding. I heard from only one person — Tom DiGuido from Oak Meadows (old Elmhurst C.C.). Tom had water coming in the windows of his shop and lost most of his equipment. The course will be closed for the remainder of the year. The Western Open was cut short and played on only half of the course with the other nine played next door on the public fee course. There were a lot of greens lost, let alone the vast amounts of fairway turf.

I hope my request for sending in the questionnaire on lightweight fairway mowing gets a better response.

For Sale: A 3 gang Locke Mower and a Ramson 180 Reel Mower, also a 3 gang. Call Mike or Mel at Inverness G.C., (312) 358-7030.

Looking for an assistant? Call Steven Schoenfeldt who has experience of 8 years in golf course maintenance and construction with Wadsworth Co. (815) 838-2454.

The Ohio State University Golf Course Management Short Course

The second annual OSU Golf Course Management Short Course will be conducted from January 18 through 22, 1988, at the Parke University Hotel in Columbus, Ohio. This short course will provide general and basic information on golf-turfgrass management. Emphasis will be placed on principles of agronomy, entomology, and plant pathology. The short course is designed for all golf course personnel including golf course employees, foremen, assistant superintendents and superintendents seeking a more formalized training in the basics of golf-turfgrass management. The registration fee is \$225.00 and is tax-deductible. The deadline to register is December 14, 1987 or until 50 applications are received. Lodging facilities are available at the Parke University Hotel or other hotels in the area. For more information, please contact Sue White at 614-292-7457 for course content, or Doug Thompson at 614-292-4230 for course registration.

Proposed By-Laws Change

One of the goals of the By-Laws Committee was to upgrade the class of the Assistant Golf Course Superintendents, also update Article III, Dues, Section 3.

The conclusion was to make Class C for Assistant Superintendents and do away with a class for inactive members. Those who currently qualify as Class C members will now be known as inactive members.

Proposed By-Law:

Class C — Assistant Golf Course Superintendent

To qualify for Class C membership an applicant shall have completed at time of application for membership, at least one (1) year as a Class D member and/or have been an Assistant Golf Course Superintendent for one (1) year and is currently employed as an Assistant Golf Course Superintendent. Class C members shall have all of the privileges of the Association except that such members may not vote or hold office.

It was also proposed, Article III, Dues, Section 3, the fiscal year begin October 1st instead of January 1st.

Both by-laws changes will be presented in detail to the members of the Association at the annual meeting on November 11, 1987 at the Cypress Inn.

If you have any questions, please contact me.

Dennis Wilson, By-Laws Chairman

Bruce Williams recently spoke at a seminar for the Greater Cincinnati Golf Course Supts. Association and is scheduled to speak at this year's Milwaukee Turf Symposium. Bruce will team up with Roger Stewart and Al Fierst presenting seminars for the PGA this Winter. The seminars will give an introduction in the basics of golf course management and will be held in Philadelphia, Minneapolis, Orlando, Indianapolis, and Atlanta. In his spare time Bruce will present the GCSAA Seminar entitled “The Assistant Superintendent”. This will be offered in Houston, Connecticut, and Virginia.

Assistant Supt. from Florida at 36 hole club, is looking to relocate to Midwest. Write for resume or call: Andy Durmester, 2481 Waldemere St., Sarasota, FL 34239. (813) 951-2235.

The pH Factor

by Paul Sartoretto, Ph.D.

Almost everyone knows that water with a pH reading of 7 is neutral, neither alkaline or acid. Perhaps, not as well known is the fact that pH numerical readings are expressed on a logarithmic scale. In other words a pH of 8 is ten times more alkaline than a pH of 7, and a pH of 9 is one-hundred times more alkaline than a pH of 7. Likewise, a pH of 6 is ten times more acid than 7, and a pH of 5 is one-hundred times more acid, and a pH of 4 is one thousand times more acid than a pH of 7.

The pH of water that is available to the golf course superintendent is something over which he has no control. He can be blessed with a source that runs 6.5 to 7, or he can be cursed with water that runs as high as 8, 9, or even 10. Constant irrigation of a golf course with highly alkaline waters is a serious problem which can only be corrected safely by repeated applications of elemental sulfur which slowly and safely oxidizes to sulfur dioxide and sulfur trioxide neutralizing the alkalinity.

However, this discourse is confined to the effect of pH of water on various pesticides in the spray tank and the measures one can take to partially compensate for some of the deleterious effects of alkaline waters.

In general the loss in effectiveness is due to hydrolysis; and rate of hydrolysis is determined by (1) pH, (2) the chemistry of the pesticide, (3) time of exposure in the spray tank, (4) temperature of the water in the spray tank.

(1) As stated before, pH is measured in logarithmic units and the hydrolysis rate of an alkaline sensitive chemical will increase

by a factor of ten for every pH unit.

(2) The chemistry of the pesticide is an extremely important factor. Most chemicals will undergo alkaline hydrolysis. On the other hand, some are acid sensitive and will undergo acid hydrolysis.

(3) Time of exposure in an alkaline medium is also a critical factor. What comes out of the spray tank during the first hour of spraying could be more effective than what comes out during the last hour of spraying.

(4) An increase in temperature of 10°C (18°F) will double the speed of decomposition. The sun ray's beating down on a spray tank will have some effect on the rate of hydrolysis, and so will constant agitation tend to warm up the spray mixture.

Various pesticide manufacturers have supplied data showing the effect of pH on the half life of their pesticides and is being reported here in table form.

Surprisingly, the insecticides Dursban and Diazinon, although affected adversely by pH, still have extremely long half-lives at high pH's. This is not consistent with what the golf course superintendent is finding in the field. Perhaps resistant strains of insects play a more important part than pH.

On the other hand products like Sevin, Malathion, Dylox (Proxol), and actidione are severely affected by high pH's. Adjusting the pH of the water in the spray tank would most assuredly improve their effectiveness.

Aside from pesticides, there are tremendous amounts of iron, magnesium, and other trace elements being used as adjuvants in spray mixtures. With the exception of boron, which is not

(cont'd. on page 16)

PROTECT YOUR WATER LINES FROM WINTER FREEZE

WE ARE OFFERING A VERY AFFORDABLE COMPRESSOR
RENTAL PACKAGE TO AREA GOLF COURSES,
CEMETERIES, AND LANDSCAPERS.



- 100 TO 2000 C.F.M. - GAS OR DIESEL
- UNITS ARRIVE FULLY SERVICED AND FUELED
WITH HOSE AND PIPE ADAPTERS

FOR SPECIAL RENTAL RATES, CALL (312) 841-2600



**PORTABLE TOOL SALES
& SERVICE, INC.**

Riverdale

13401 SOUTH HALSTED ST.

312/264-0870

Mt. Prospect

3425 SOUTH BUSSE RD.

312/437-1950

Warrenville

3 S 430 RTE 59

312/393-6900

Save now, pay later during the ProTurf® Pre-Season Sale

All qualifying Pre-Season orders shipped during the August-December period won't be billed until next spring.

Ask your ProTurf
Tech Rep for details.



Rick Elyea
Technical Representative
1035 Chelsea Lane
Aurora, Illinois 60505
Telephone: 312/820-2800

BROOKSIDE SOIL TESTING and IRRIGATION WATER ANALYSIS

includes a complete report, and recommendations for producing quality turf on golf courses.

ADVANTAGES:

- Improves the environment of the grasses and eliminates turf diseases
- Decreases expenses for pesticides
- Reduces thatch and eliminates fairway renovation
- Decreases expenses for costly fertilizers
- Healthy turf attracts more golfers and increases income

Contact:

Golf course specialists for over 20 years

V. J. Zolman and Son
2618 Harvey Avenue
Berwyn, Illinois 60402

Phone: (312) - 788-4565
(312) - 461-3679

"The Facts . . . Nothing But The Facts"

The fact of the matter is the combination of years of quality service by **Lewis International** and the great line of **Roseman Hydra-Gang™ Reel-Mowers** is a new winning combination for all of Chicago's finest golf courses.

Here are the facts . . . nothing but the facts.

FACT Lower compaction ratio than the apparently lighter triplex greens mowers.

FACT Better-than-triplex cutting quality while maintaining 7 gang mowing production.

FACT Most efficient 30" directly driven hydraulic reel.

FACT Longer lasting, more durable reels and bedknives.

FACT Interchangeable parts minimize inventory.

FACT Infinitely variable reel speed control for mowing and back lapping.

FACT Vertical thatching units interchangeable with mowers.

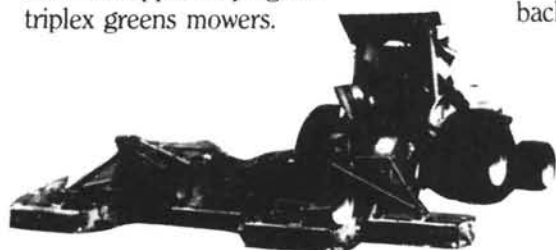
FACT Available with either front caster wheels or full rollers.

FACT Cuts from 3/8" to 2 1/2" in any increments.

FACT Reduces labor and maintenance costs.

Seeing Is Believing!

Call Ken Quandt or Avery Harris for a demonstration today.



Lewis International, Inc.

55 E. Palatine Road
Prospect Heights, IL 60070
(312) 537-6110

(pH Factor cont'd.)

truly metallic, all of the metallic salts will undergo hydrolysis at pH above 7 and end up as hydroxides and oxides which are totally inactive. The classic example is ferrous sulfate which hydrolyzes rapidly and will end up as inactive iron oxide rust, sometimes in sufficient amount to clog the sprayers.

When these metals are chelated they become immune to hydrolysis and are totally and completely available to the plant.

Correcting the pH of the water in the spray tank is possible and achievable, but should not be done haphazardly. The accurate way to monitor pH is with a pH meter. But these meters can go haywire unless they are checked and standardized on a daily basis. The use of pH paper is a cruder way of checking pH and will not be accurate within 0.5. But since a pH of between 6.5 to 7 is an acceptable range, one can get by with pH paper.

The one acid that is readily available to everyone is vinegar. It should be carefully added to the water in the spray tank in small increments, checking with pH paper. If too much vinegar is added and the pH drops below 6.5, the pH can be brought back with household ammonia. Always adjust the pH of the water before adding the chemicals to the spray tank.

W. A. Cleary Chemical Company has developed a very safe acidifier which also acts as a chelating agent. Although, slightly more expensive, it comes with a supply of pH paper and instructions for use. I don't know of any other chemical company that has a comparable product.

There is an important caution that the superintendent must be made aware of — the effect of pH on postemergent herbicides. Specifically, herbicides such as 2, 4-D, MCPP, MCPA,

and Dicamba are water insoluble acids that have been put into solution with amines. These solutions are always alkaline, and if they are acidified these herbicides drop out as water insoluble gums, which will foul up the spray tanks. They are best sprayed with the alkaline water. **Never adjust the pH of herbicidal sprays.** However, methylarsonates such as MSMA and DSMA are unaffected by pH.

The best way to conclude this article is to remind the superintendent that unless he carefully and painstakingly adjusts the pH of his water within the narrow limit of between 6.5 to 7, it would be better for him to accept the alkalinity of his water and do nothing at all.

Common Name	Chemical Name	pH	Half Life Time
Dylox	Trichlorophon	6	89 hr.
Proxol		7	6.5 hr.
		8	63 min.
Malathion	Malathion	◀5	1 hr.
		7	7.8 hr.
		▶8	1 hr.
Sevin	Carbaryl	6	100-150 days
		7	24-30 days
		8	2-3 days
		9	3 hr.
		10	20 min.
Betasan	Bensulide	4 (20°)	28+ days
		7	27+ hrs.
		10	21+ hrs.
Diazinon		3	706 min.
		5	31 days

Introducing New Aerators by Classen



- Weight — 450 Pounds (Tractor and Aerator under 1400 Pounds)
- Capacity — 50,000 Square Feet Per Hour at 2 by 4 Inch Spacing
25,000 Square Feet Per Hour at 2 by 2 inch Spacing
- Swath — 48 Inches
- Hole Pattern — From 2 by 4 Inches down to 2 by 1 Inches depending on speed of tractor
- Tine Sizes — 1/4", 3/8", and 1/2" Standard-5/8" Optional
- Can be used with any PTO Drive
- Under \$6500.00.



- Weight — 460 Pounds
- Capacity — Up to 13,000 Square Feet Per Hour
- Swath — 24 Inches
- Hole Pattern — 2 by 2 Inches
- Hole Depth — Up to 3 Inches
- Engine — 8 Horse Power OHV Honda
- Direction of Travel — Away from Operator
- Tine Sizes — 1/4", 3/8", and 1/2" Standard-5/8" Optional
- Under \$4500.00.

Roseman Tractor Equipment Co.
2620 Crawford
Evanston, Illinois 312/864-1842
Call for demonstration

PAARLBERG CHEMICALS

featuring

- Par-Ex Fertilizer
- Vertagreen Fertilizer
- Du Pont Chemicals
- Chipco Chemicals
- Daconil - Dacthal
- Bean Sprayers
- All Major Turf Supplies

Quality • Value • Service

1840 E. 172nd St., So. Holland
312-474-3086 815-469-6730

Nels J. Johnson, Tree Experts, Inc.

SINCE 1930

Nels J. Johnson, Sr. - Karl G. Johnson
Nels J. Johnson, Jr. - Complete, economical tree service for Private Estates,
Parks, Municipalities, Golf Courses, Cemeteries,
Schools, Industrial Areas.

All phases of Arboriculture, Diagnosing, Pruning, Treating,
Transplanting, Fertilization, Hydraulic and Mist Spraying,
Removals, Stump Routing, Municipal Forestry. Chemotherapy
for elms, and other trees.

• FULLY INSURED •

Graduate -- Licensed Arborists

MAIN OFFICE - 912 Pitner Avenue, Evanston, Illinois 60202
Phones: GRenleaf 5-1877 - GR 5-5255
Hinsdale, Illinois - FA 5-0970

CUSTOM FORMULATED FERTILIZERS

Tyler

Enterprises, Inc.

Rt. 53, Elwood, IL 60421
815-423-5551

- Granular or Liquid
- Bagged or Bulk Delivery
- Formulated to your specifications at no extra cost

- Turf Chemicals
- Grass Seed
- R & R Replacement Parts

KOELPER BROS., INC.

Golf Course Building and Remodeling

444 E. Mors Avenue
Wheeling, Illinois 60090

312-438-7881
DANIEL I. KOELPER

312-541-9182
VICTOR C. KOELPER

FOR THE FINEST IN SOD THORNTON'S SOD NURSERY

312 - 742-5030

Rt. 2 Box 72

Elgin, Ill. 60120

ANNOUNCING

two great new brands at Builders

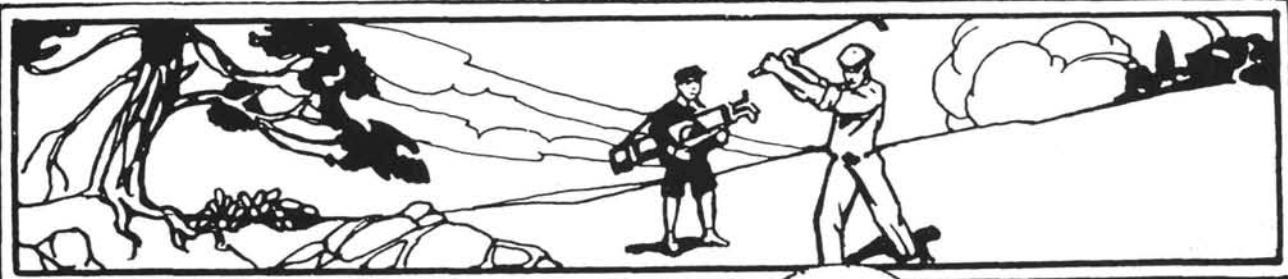
for GREENER TURF AND UNIFORM WATER COVERAGE

THOMPSON

TURF IRRIGATION EQUIPMENT

WeatherTec

irrigation products



Builders Plumbing Supply / Irrigation Dept
133 South Route 53
Addison, Illinois 60101

(312) 629-8119 department
(312) 629-8100 switchboard



A good sprinkler
system is an
investment to
last a lifetime

GOLF COURSE IRRIGATION SALES CO.

Div. of Halloran & Yauch, Inc.
2040 Lehigh Ave., Glenview, IL 60025

**CUSTOM PUMP HOUSE
CONSTRUCTION & REMODELING!
IRRIGATION INSTALLATION
& REMODELING!
GOLF COURSE DRAINAGE SYSTEMS!**

Call Us For Your Golf
Course Irrigation Needs!

(312) 729-1625

BOJO TURF SUPPLY CO.

ALL MAJOR TURF SUPPLIES



- Plant Marvel
- Vertagreen
- Du Pont
- Daconil — Dacthal
- FMC Sprayers
- Chipco
- Naiad
- Aqua-Gro
- Fertilizers
- Elanco

24356 Harvest Hills Road
Frankfort, IL 60423

815-469-6730



TIMBERLINE, D.B.A. BILL BOYD

We offer fast, dependable service —
complete golf course construction
and renovation.

Clubs Timberline had the pleasure of working:

Oak Brook Park District
Downers Grove Park District
Westmont Park District
Naperville Park District
Butler National

Naperville Country Club
Timber Trails Golf Club
Ruth Lake Country Club
Hinsdale Country Club
Riverside Country Club

Timberline • 1129 Jefferson • Downers Grove, IL
963-9088

**Priced Competitively...
Quality Products...**

Known For Service!

You get fast, courteous, service
from Arthur Clesen. We've staked
our reputation on it. Try us and
see the difference.

Immediate Delivery of...

- Chemicals
- Decorative Mulches
- Fertilizers
- Grass Seed & Mulches
- Hose & Fittings
- HPI Evergreen Greens Covers
- Ice Melt
- Marking Paint
- Oil Absorbents
- Soil Conditioners
- Hand Tools
- Soil Stabilizers
- Sprayers
- Spreaders



Arthur Clesen, Inc.

543 Diens Dr. • Wheeling, IL 60090
Call 312-537-2177

TENNIS COURTS

Construction — Resurfacing

M-C Sport Systems, Inc.
Addison, IL

John Maniscalco

312/628-0500



JAMES R. BURDETT

Grounds Maintenance Supplies

Post Office Box 52
Lombard, Illinois 60148
(312) 620-5558
Car Phone 802-5656

NATIONAL CHEMSEARCH CORP.

1001 Craig Road
St. Louis, Missouri 63146

Fall Colors: What Causes Them

Ahh! The beautiful crisp days of fall and all those beautiful colors! What causes these brilliant leaf colors, and why do they occur at this time of year? Much credit has been given to "Jack Frost" but erroneously so, says James A. Fizzell, University of Illinois Horticulturist in Cook County. A hard frost would quickly destroy the colorful beauty of fall, killing the leaves and resulting in the brown of winter.

How do we become the beneficiaries of such a brilliant display of fall color? The fall colors come from five major pigment groups. The green colors, evident in summer are a product of the chlorophylls. The yellow colors are from xanthophyll pigments. The orange, as well as some yellow and red colors, are a result of the presence of carotenoid pigments, while the very showy shades of dark red, scarlet and crimson are due to anthocyanins.

Anthocyanins are also responsible for the tints of blue, violet and purple seen mainly during spring and summer. The least noticeable pigments seen in fall are the tannins, which are responsible for the deep browns of oaks. Fall color is controlled by hereditary factors and environmental conditions.

The kind of pigments, and the color the leaves turn in the fall, is genetically controlled. Every fall, for instance, birch trees all turn yellow, red oaks turn red and Ohio Buckeyes turn orange.

The intensity of the fall color for each tree or shrub is influenced by light, water, temperature, nutrition and the soluble sugar produced by the plant.

Sugar accumulation in the leaves is the most important factor in production of anthocyanins in the fall, and the intensity of the red and orange colors. Trees and shrubs kept healthy during the summer and receiving full sun and enough water have the best chance for good fall color from anthocyanins. The amount of color depends on fall weather conditions. Sunny fall days followed by cool (40 to 45 degree F) nights favor accumulation of sugars in the leaves. Cloudy fall days and warm nights result in decreased sugar production and a movement of sugar out of the leaves, and less fall color.

The yellow fall colors so dominant in the landscape because of xanthophylls and carotenoids, are actually present in the leaves during the summer. These are hidden by the dark green chlorophyll in the leaf. As temperatures and light intensity decrease in late summer and early fall, chlorophyll breaks down, exposing the yellow pigments.

What are our chances of brilliant fall colors this year? In much of the Chicago metropolitan area we had little rainfall this summer. To the north of us in Wisconsin and Michigan there was a lot of rain and trees and shrubs have had good conditions for sugar production. If fall weather turns sunny with cool nights and no severe freeze we can expect those colors.

**James A. Fizzell, Sr. Ext. Adviser
Horticulture**

KILLIAN
DESIGN GROUP INCORPORATED
GOLF COURSE ARCHITECTS
639 First Bank Drive, Palatine, Illinois 60067 (312) 358-8884

FORE



**The finest golf courses
and lawns in America are
fertilized with Naturally
Organic Milorganite.**

- Iron is the element (along with nitrogen) that will keep your lawn summer green when your neighbor's fades away this summer.
- Naturally organic Milorganite does not require watering in, so lawns require less water in the heat of summer. Naturally organic Milorganite improves water holding capabilities of most soils for improved drought resistance.
- Proven superior by over 50 years of university testing.

★ THE MILORGANITE EXTRAS ★

SUPPLIES HUMUS: In addition to being the ideal fertilizer, Milorganite also adds large quantities of organic matter (humus) to the soil. Naturally organic Milorganite actually improves the plant growing capabilities of all soils and has been proven to reduce disease incidence and the build-up of harmful thatch.

NO WATERING IN REQUIRED: Naturally organic Milorganite does not require watering in, so lawns require less water in the heat of summer. Naturally organic Milorganite improves water holding capabilities of most soils for improved drought resistance.

NATURALLY RICH IN IRON AND CANNOT BURN.

RANSOMES

Motor 180



Excellent for fairway, tees
Catchers available

ASK FOR A DEMONSTRATION NOW!

OLSEN DISTRIBUTING COMPANY
969 N. Pepper Road
Barrington, Illinois 60010
1-312-381-9333

Life in the Sun

by Edwin Wollenberg, Retired Supt.

Bob Breen's fine article on this subject in the May issue of the **Bull Sheet** was excellent. I hope everyone read it.

The superintendents, who chose the vocation they did, are subjected to this risk daily. It's outdoor work and precaution should be exercised by those who feel they may be susceptible, and maybe should return to their office whenever they see their shadow — sort of ala groundhog way.

Of course we know that the warnings by the dermatologists isn't going to stop sunbathing, swimming and the likes, because it's something we're going to do. And some weeks ago the Associated Press released an article saying a Dr. Russel J. Reiter, professor of some sort of neurology department at the University of Texas, said exposure of the sun is good for everyone. Sooo, here we go again, and we have to weigh the pros and cons.

Dr. Reiter is an internationally-known expert on the pineal gland, which produces the hormone melatonin in the brain. The hormone is found mostly during darkness and too much of it can lead to depression, he said. The answer, he suggested, is more exposure to sunlight.

"Certainly sunlight justifiably has gotten a bad rap in terms of its effect on skin cancer", Dr. Reiter said. "Positively, however, sunlight generally seems to improve mood, sexual performance, possibly, and general attitudes".

Well, ever since I retired I have been taking it easy. I only do the things I like to do, and forget about the things I had to do before. I sleep and nap a lot, because I read several months ago that this was an easy way to burn calories, instead of the way that leaves you weak and exhausted. And I draw the shades when I take my naps, to keep it cool, dark and restful. Gosh, I thought I had my life pretty well together.

It was about a week ago that I first noticed that something seemed out-of-whack with me, physically. I seemed depressed and lethargic, and my sex drive didn't want to slip into overdrive. I seemed to be a mess and wondered if it could mean the end of the trail.

I was about to make an appointment to see a doctor, when I remembered Dr. Reiter and his suggestion to get more sunlight. "Light can be used as a drug in various types of depression. What is more convenient, and what is more non-invasive than light? You don't have to take anything internally", he added. Yep, it had to be I wasn't getting enough sunshine, and it was causing me to have a melatonin build-up. What the hell, it was worth a try, I figured.

So, I started taking my naps in the backyard on a lounging chair in the sun, and believe it or not, my depressive moods and sluggish feelings have left me, and a quiver has returned to a portion of my body considered dead a few weeks ago.

Dudley Smith coersed me into going with him to the Field Day at Purdue, July 22nd. It was sunny, sultry and very hot. Dudley knew how to cope with the elements and wore a Sam Snead hat. Not only was he shielding the sun rays, he was also the epitome of sexiness.

I didn't wear a hat, because I was burning off too much melatonin — but I thought I looked pretty sexy too.

BIG TREES INC.

Serving northern Illinois



Please, call us today! Whatever your tree needs . . . to buy, relocate, or transplant . . .

312/481-5224

Formerly DeVries Tree Movers Member of: ILCA, ISNA

PUMP HOUSE SPECIALISTS

ALL FACETS OF
ELECTRICAL CONTROL PANELS

CENTRIFUGAL & TURBINE PUMPS

PRESSURE REGULATING
VALVE REPAIRS

NEW CONSTRUCTION

EXPERT TROUBLESHOOTING

FOR SERVICE CONTACT:

LYN-TECH SYSTEMS

(312) 250-0381
ELECTRICAL, MECHANICAL
AND
PUMPING MACHINERY