Continued from page 9

your programs and you will avoid some of the problems that we had.

My first attempt at a transfer gave us an error message on the screen of the target computer. Thoughts of a wasted day ran through my head as I feared a problem had developed in my computer. Then I tried to transfer file by file and that worked just fine. Periodically during the day we had file transfer errors that drove me crazy, but we eventually got the system to work the way

I wanted it to. I designed an opening screen menu and some modest batch files to keep things as simple as possible for the operator. I think I may have caught their interest.

All in all, it was a very interesting day. As much as I have bad-mouthed the IBM PS/2 in this column and casual conversation, I gained a measure of respect for that machine and I think Monroe and Pat had a lot better time than they thought they were going to have. Familiarity helps to eliminate some of

the fear. Anyway, we crammed as much information into six hours as any of us could handle. Now, I'll give them a few days to absorb the material we covered before I teach them some more.

The next article will cover the computer seminar that is going to be held during the GCSAA convention at Anaheim. It will be a gathering of many of the computer literate superintendents and suppliers in our industry and I am really looking forward to it.

University of Wisconsin-Madison



DEPARTMENT OF HORTICULTURE HAS A BIRTHDAY! By Dr. Robert C. Newman

The University of Wisconsin got under way in 1849. Another 40 years passed before an official Horticulture Department came into being. The Horticulture Department was created 100 years ago in 1889 with the appointment of Emmett S. Goff as horticulture professor. The department was one of the original four College of Agriculture departments and was housed in King Hall from its inception until 1911. Much of the early work in horticulture was related to fruit production.

Professor Franz Aust joined the department in 1915 and had teaching and extension responsibilities in the area of landscape architecture. Records indicate that Professor Aust did limited research on lawns and windbreaks.

Professor Aust was on the program of the first midwest greenkeepers short course held by a midwest state university. The five-day short course was held in Madison in February, 1930 with 59 greenkeepers from Illinois, Minnesota and Wisconsin in attendance. Professor Aust discussed care of trees and landscape problems — perhaps not directly turf related but certainly golf orientated.

Professor William Longenecker joined the Horticulture Department in 1924 as teacher of landscape architecture and among other responsibilities identified landscape plants including turn weeds. Professor Longenecker and later Professor Joseph Elfner taught a Horticulture course titled "Lawns." The course covered both lawn construction and lawn grass management.

Professor George Ziegler joined the department in 1947 as an extension landscape architect. In the 1950's Professor Ziegler wrote an eight-page extension circular titled "Home Lawns."

In 1964 the Landscape Architecture Department was established as a separate department and emphasis since that time has been associated much more with landscape design than plant management.

Professor Malcolm Dana worked on turf weed control in the Horticulture Department from about 1954 to 1964. Professor Robert Newman assumed responsibility for turf weed research and Extension from 1964 to the present time.

Faculty of the Agronomy, Entomology, Horticulture, Plant Pathology and Soils sponsored statewide, two-day turfgrass conferences from 1961 to 1965. Conferences were held in Madison on the campus. Since 1965 the departments of Entomology, Horticulture, Plant Pathology and Soils have held turf conferences in three or four locations around the state every year. Attendance exceeded 500 in the four-conference series in 1988.

Robert Newman started to teach Horticulture 261, Lawn Management, in 1964. The two-credit course is taught in the fall semester with emphasis on grass and weed identification. Turf management was taught from 1964 to 1986 in the regular College of Agricultural and Life Sciences five-week short course. The short course was changed to a one-week session in January in 1987 to accommodate employed turf management clientele.

Other turf related activities within the Horticulture department include turfgrass and turf weed identification, turf weed control research, turf growth regulator research, turf cultivar demonstrations and answering a multitude of turf questions for turf professionals and homeowners.

The most recent turf publications by Robert Newman are Lawn Establishment, UWEX publication A3434 and Lawn Maintenance and Problems, UWEX publication A3435.

Editor's Note: The Department of Horticulture's rich and varied history is beautifully recorded in a booklet form. It was written by Emeritus Professor M.N. Dana. This article by Professor Newman is a supplement to that history. Call the Departmental Office on the Madison campus for details on how to obtain a copy.

WANTED TO BUY - USED EQUIPMENT

Outfront mower, 24-36 HP; Cushman with topdresser; trap machine. Only interested in equipment that is in good condition with less than 500 hours, unless in exceptional condition.

CONTACT:

Christmas Mountain Village Attention: Chuck Wollner S944 Christmas Mt. Road Wisconsin Dells, WI 53965 Phone: (608) 254-3965

NO OTHER PLAYER APPROACHES THE GREEN WITH AS MUCH SKILL OR EXPERIENCE.

And nobody matches Jacobsen greens mowers for precision cut, balance or durability.

Over 65 years of powered greens care experience and innovation make Jacobsen walk-behind greens mowers the industry's standard. And they keep getting better.

The new front roller and no-rust aluminum drive roller are precisely machined to ensure mowing accuracy. With the recognized superiority of the Jacobsen designed reel and bedknife combination, this system delivers the smoothest, truest cut, down to 3/2."

And only Jacobsen uses a 2-cycle engine for longer

life, less maintenance and reduced vibration. This smoother running engine is positioned for side-to-side, fore-and-aft balance, for the most precise cut possible

Choose the 22" unit for the finest tournament-quality cut. Or select the 19" Championship greens mower for an unmatched cut on highly undulating greens.

Attach the exclusive Turf Groomer™ for faster, truer, healthier greens.

Team either Jacobsen greens mower with the Turf Groomer greens conditioner for the finest greens grooming system available.

Proven on tournament-play courses across the country, this system increases putting speeds up to 20% without lowering your height of cut. And it cuts those horizontal grasses and surface runners other mowers miss, to reduce grain. For healthier, better

looking greens. Greater uniformity from green to green. And truer putting.

Ask your Jacobsen distributor for a free demonstration. Attractive lease and finance plans available. Or contact: Jacobsen Division of Textron Inc., Racine, WI 53403.



Jacobsen Division of Textron Inc.



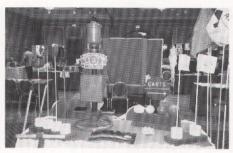
HORST DISTRIBUTING, INC.

P.O. Box 110, 444 N. Madison St., Chilton, WI 53014-0110 Phone 414-849-2341

Turf Maintenance Equipment & Supplies Serving N.E. Wisconsin & Upper Michigan

Continued from front page

WTA officers Red Roskopf and Terry Kurth were speakers. And for the first time a faculty person from another land grant institution was on the program. Dr. David Wehner from the University of Illinois spoke on environmental stress in one session and focused on pre/post emergent crabgrass control in another.



The tabletop display area had everything from tee and green supplies to. . . .



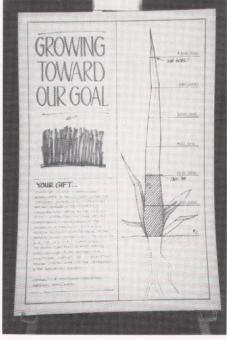
. . . . rootzone mixes for putting greens.

PLEASE,
Pledge YOUR
Support to
the Noer Center
TODAY.

The noon luncheon on the second day was a real treat for the 250 people in attendance. Pete Vukovich, as a spokesman for Snapper Mowers, came as a guest of Stewart Lindsay. Vukovich was the American League Cy Young Award winner in 1982 when he helped the Brewers to the World Series. Vuke gave a very enjoyable talk about life after baseball. Interestingly



The O.J. Noer Center HONOR ROLL on display at the Winter Turf Conference.



Moving up the "grass blade" toward our goal of \$300,000 for the NOER CENTER.

enough, he left the Country Inn for County Stadium where he was selected to replace Mike Hegan as color commentator on the Milwaukee Brewers television network.

There's only one problem with a successful meeting like this one — next year's planning committee will be pressed to plan an event for 1990 that will also merit the title "Best Ever."



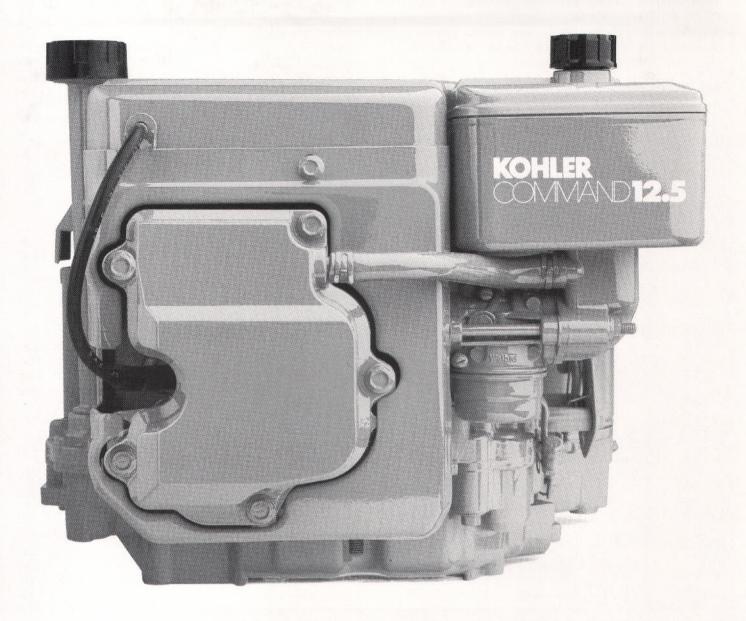
John Turner of NOR-AM formally presented Jeff Bahr, a UW-Madison senior in turfgrass management, the NOR-AM scholarship for 1988.



Dr. Gayle Worf had an excellent turfgrass pathology display.



WTA's attractive information center.



THE STRONG, SILENT TYPE.

Now you can have the strength and reliability of a Kohler Command engine, at quieter-than-ever engine noise levels.

Kohler Command vertical shaft engines are available with an optional Quiet Plus[™] package that lowers sound level output significantly.

In fact, in a recent test performed at the Kohler engine sound laboratory, the CV 12.5 with Quiet Plus registered sound power levels two to four dBA's below three competitive engines of similar horsepower.

These new levels of quiet will help you meet

stringent EEC noise standards without sacrificing torque or power.

Command engines also offer overhead valves; Kohler's electronic ignition system; full pressure lubrication; full flow oil filters; hydraulic lifters and more. Oil Sentry™ protection is available. For more information about Kohler Quiet Plus or the

For more information about Kohler Quiet Plus or the complete line of Command engines write Kohler Co.,

Engine Division, Kohler, Wisconsin 53044. Or call 414-457-4441.

KOHLER



THE FIRST MOWING

By Monroe S. Miller

It's an annual subject of discussion among outdoor people, including most golf course superintendents. The question this time of year is, of course, when spring begins.

Thoreau once wrote that the human ear isn't keen enough to catch the first footfalls of the returning spring season. That may be. But even if true, that hasn't stopped the conversation about when that moment is.

Some look to the stars. It could be argued that spring begins on the tick of the winter solstice. That is when the sun begins to head north again. Frankly, I cannot believe that anyone really thinks spring begins **before** Christmas! No question — by mid-January there is a noticeable difference in the height of the sun and you feel the days lengthening somewhat. It's also true that the winter solstice marks a turn for the better, both realistically and astronomically. One look at the ground, however, would cancel this notion in the minds of most of us ordinary mortals.

Substantially more people subscribe to the belief that spring starts on the day of the vernal equinox — about the 21st of March. The argument here is certainly more persuasive. I've never personally seen such an equinox when there weren't some real and honest signs of spring, even if we still had a couple of feet of snow on the ground.

My wife is one of a group who seems to think that the sight of a robin marks the true beginning of spring. There's some sense to that. She doesn't mean winter robins, but rather the true migrants who overwinter in the warmer southern climates. It's usually late March or early April when Cheryl sees the first one and makes her declaration that "Spring is here." It is not a bad sign to use; robins tend to travel north with the spring weather. But I've seen some years when they've guessed badly and have had to retreat to escape the "spring" weather and a serious snow storm!

The robin watchers are joined each year by the red-wing blackbird watchers, the geese people and even some who look for the activity of the bees. Each group declares their sign is the real sign of the return of spring to Wisconsin.

Bird watchers are rivalled in numbers, I've noticed, by plant people. I'm more inclined to side with them in looking for the first sign of spring. The crocuses seem to bloom first and give the hint that the daffodils aren't far behind. Most of us have them around our clubhouses and are joined by members who watch them with interest, too. The daffodils are followed by the hyacinths and they are in turn succeeded by the violets we all have at the woods' edge. Then the tulips! All conjure up the most beautiful visions of springtime.

Season watchers have other clues. In our town, some watch for the ice to leave Lake Mendota. Since our golf course is right on her shores, I give a lot of credibility to the correlation of the Mendota ice breakup and the arrival of spring. Some watch for buds — weeping willow and pussy willow are good indicators.

Others automatically think it is spring when the tip off of the state high school basketball tourney takes place. Easter is the first day of spring for a lot of other people, regardless of where it falls on the calendar.

And in our cozy world of golf, many many players hold tightly to the belief that "if it's opening day, it must be spring!" Not too far from the truth. Baseball fans say the same thing about the Brewers' opening day. They, too, are often fooled by snowstorms.

What really inspires the question in the first place is the variability of the spring season. The first stirrings are subtle, when we know that winter is relaxing but yet the growing days aren't here. And we are impatient, especially when the real love of work is a golf course. Even "ordinary people" are looking for signs of green life. We're all restless after too many months of confinement.

The emotions and frustrations of waiting for spring were very well put by

Robert Frost in his poem, "Two Tramps In Mud Time". Frost had something when he wrote:

"You know how it is with an April day When the sun is out and the wind is still,

You're one month on in the middle of May.

But if you so much as dare to speak, A cloud comes over the sunlit arch, A wind comes off a frozen peak, And you're two months back in the middle of March.''

What Frost is really saying is that this is the time of year when anything can happen; it seems like June one day and January the next!

All of this wondering and speculation about when spring begins is really kind of silly. If you want to know the answer to the age old question, ask me because I know when spring arrives. Exactly, precisely when. It is at the time of the first mowing. My bet is that a lot of my colleagues feel the same way with the same certainty.

The first mowing of the golf course is an exciting event. It is the reward for spending a couple of months in the shop, readying equipment for another season. If one is able to get that first mowing in before opening day, and we usually try, it makes that a really spectacular day.

The sight of any equipment on the golf course for the first time after the winter months is always something to behold. And that view is made even better because the grass machinery we put out in the spring is clean and polished and sometimes freshly painted. Almost every year we also have a new piece of equipment or two that we have pined to use for a couple of months. Frankly, when it comes to new mowing equipment going out for the first mowing of the year, I like to assign myself as the operator. It's a thrill I hope I never lose. That sight of machines cutting golf course grasses, after such a long absence, is a sure sign that spring has arrived.

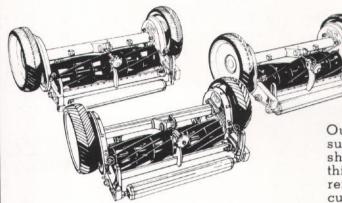
The first mowing always has more impact if preceded, even by only a few days, by some rain. The golf course can be dominated by winter brown with only the slightest hint of green. But almost immediately after the first rainfall it is miraculously green. A "green rain" brings on the golf course grasses, and that growth brings forth the call to "get

Continued on page 17

Reindert TURF EQUIPMENT



IRRIGATION SUPPLIES



OUR GANG

Our Reelmaster® 5, 7, and 11 blade gang mowers deliver a superb quality cut and finished look. Whether you need a short, super-formal cut. Or a longer informal cut. Or something in-between. Yet all three also deliver

renowned Toro durability to keep you cutting. For more information, contact the Toro distributor listed below.

TORO

THE PROFESSIONALS THAT KEEP YOU CUTTING.

Single Point Adjustment

THE PROBLEM SOLVERS



SPRINKLER SYSTEMS

- FULL LINE STOCKING DISTRIBUTOR
 - REPAIR & SERVICE CONSULTATION
 - DESIGN & SPECIFICATION
 - PUMPS & CONTROLS
 - PLASTIC PIPE



Reinders turf equipment irrigation supply

13400 WATERTOWN PLANK RD., ELM GROVE, WIS 53122 PHONES: LOCAL 414 786-3301 WIS 1 800 782-3300 Continued from page 15 the mowers across the tracks."

After having seen either that dormant brown turf or the white snow cover for so many weeks, the new green makes it look like a real golf course again. Putting mowers on the ground redefines all the playing features - fairways look like fairways: greens and tees really look like greens and tees again. The first mowing works wonders in leveling everything and in cleaning up the playing ground that has received so little attention since early November. Patterns are re-established. Geometry and symmetry and arcs and curves have returned, all neat and clean. Golf courses almost take on the appearance of pieces of public art after the first mowing, catching the eye and attention of nearly everyone pass-

The smell of the first mowing is also the smell of spring, another pretty good sign of the season. There is a sweet, distinctive fragrance that hovers over the whole golf course after the first mowing. I think it seems so sweet because it has been so long since that fragrance last filled our nostrils. For a guy who was raised on a farm, it conjures up wonderful memories of the first crop of hay put up in the barn.

When you really get down to it, the reason that the first mowing signals spring is probably because it signals that the grass is growing again. Few things are more beautiful than a Wisconsin golf course green with the freshness that only comes in spring. When the grass is green enough to mow, it means that now all of spring can come into bloom — all the flowers and all the trees. The old world will be new and pretty again.

Mowing a golf course for the first time is the same as saying, with all the excitement and exuberance you can conjure up, "SPRING IS HERE!"



THE GRASS ROOTS DONATES TO THE NOER CENTER!

The Wisconsin Turfgrass Association Winter Conference's Wednesday luncheon was an especially satisfying one for the WGCSA's Rod Johnson. He used the event to present the WTA with a check for over \$2,500 to be used for the O.J. NOER CENTER for TURFGRASS RESEARCH.

The gift was Rodney's reward for a superb job as business manager of the GRASS ROOTS. The money given the NOER CENTER was generated without the benefit of any increase in the ad rates. Needless to say, Rod was generous in his praise of our advertisers — without them it wouldn't have been possible.

Rod Johnson gives WTA president Terry Kurth a check for over \$2,500 for the NOER CENTER for TURFGRASS RESEARCH.



MOWER INC. CONCEPTS, INC.

Introduces The Fairway Frame T Converts A Toro Greensmower To A 5-Unit Fairway Mower

- * INEXPENSIVE
- * LIGHTWEIGHT
- * DURABLE

ALSO OFFERING:

- * Rebuilt Greensmowers
- * Reel Spin Grinding
- * Full Service Shop

Call For More Information 715-754-2636



the bruce company of wisconsin, inc.

(608) 836-7041

LEE BRUCE

GOLF COURSE CONSTRUCTION

2830 W. BELTLINE HWY. • P.O. BOX 330 MIDDLETON, WI 53562



Springtime Thoughts About the Weather and Some Other Things

By Monroe S. Miller

I can almost hear the groans now as a lot of you say, "Please, not another word about the drought of 1988. I don't think I can stand it." But there are some things that have happened since last summer that belong in the final chapter before we close the back cover of the book about the drought, hopefully for good.

As a way of confirmation of our misery, John A. Dracup, a civil engineer at UCLA, says that the drought of 1988 was the nation's worst natural disaster on record. It caused an estimated \$30 billion in agricultural losses and its related heat wave contributed to 10,000

deaths.

As a point of reference, the hurricane that struck Galveston, Texas on September 8, 1900 and killed 6,000 people was the second worst natural disaster in America's history.

Experts gathering at the annual meeting of the American Association for the Advancement of Science sought to assess the drought effects and costs. I think that their organization adds a lot of credibility to the estimates. Despite the fact that the 1988 drought was slightly less severe in area and intensity than the droughts of 1932-1936 and 1953-1956, 70 percent of the nation experienced "extensively warm and dry conditions."

Summer high temperatures set records for any date in 13 percent of the country. The heat and resulting stress contributed to the estimated 10,000

deaths noted above.

Scientists believe the most long-lasting effects will be losses to our environment. For example, populations of certain species of wildlife in the Mississippi River basin were reduced by five to 30 percent. The damage from forest fires was the greatest on record. Falling water levels on the Mississippi River brought a stop to barge traffic in June and July.

On the one hand, researchers agreed it was impossible to say whether the drought was evidence that global warming (known as the greenhouse effect) was beginning to take hold. But they did agree that the drought of 1988 is not over and that a large portion of the country, including Wisconsin, remains vulnerable. If we have a dry spring, we could have an extremely serious situation on our hands.

Just what we don't need on our golf courses.

It's a relief to read that the AAAS scientists don't necessarily think the greenhouse effect is on our doorstep. Some other of our country's researchers are confident enough to declare, unequivocally, that the greenhouse effect wasn't the culprit in the unusual weather of 1988, either the drought in our corner of the world or the record rainfall and floods in Bangladesh.

Scientists in general and climatologists more specifically believe that massive, naturally occurring climatic forces in the tropical Pacific were the culprits. Those forces involved ocean temperatures and atmospheric winds. They now believe these forces are intricately interconnected. Some are coming to the belief that conditions in the equatorial Pacific are the planet's most important source of short-term climatic changes. According to the theory, which wasn't even realized or developed three years ago, the drought of 1988 began when unusually cold water in the Pacific near the equator pushed an "intertropical convergence zone" (an area where trade winds collide) farther north than usual. The zone overlapped abnormally warm water southeast to Hawaii. Scientists cannot explain this patch of warm water, but the result of the clash of it with cold water caused an unusual amount of thunderstorm activity in an area where it usually doesn't occur. These storms disturbed the atmosphere, setting up ripples and swirls that became high and low pressure systems. These systems pushed the jet stream far to the north. The movement of the jet stream more northerly than usual made way for a large, rainless high pressure system which brought on our drought.

Rain that normally fell on areas like Wisconsin was shunted along the jet stream into Canada. Once the drought began, it fed on itself as evaporation at the Earth's surface decreased and surface temperatures increased. Even if a cloud wanted to form, there wasn't enough moisture to produce rain.

Those investigators are not dismissing the greenhouse effect. They recognize that there may be warming of the earth caused by the pollutants we are pumping into the atmosphere and know it could have a major effect on our weather in decades ahead. They simply believe this newly developed theory and attending information more clearly describe the 1988 disaster.

See the January issue of Science magazine for more reading. Heaven knows it affects all our lives.

Since we are always looking for signs of what is to come, what does the warm January of 1989 signal for us?

As every golf course superintendent probably knows, Wisconsin had its warmest January since 1944. The average temperature, according to state climatologist Douglas Clark, ended up about 27 degrees above zero. That's around 12 degrees above average and about the same as we had 45 years

The warmest January in Wisconsin was in 1933 when the temperatures av-

eraged 30.8 degrees.

We should be grateful for one thing: "Temperatures this warm January were very unusual, but they DO NOT predict much," Clark said. He added that atmospheric patterns seem to shift pretty abruptly so the fact that you have a warm January doesn't really tell you anything about February (or July). In 1933, for example, February was above

Most of us join the farmers in expressing some gratitude for the warm January winter weather; it helped remove a lot of the ice on alfalfa fields and golf courses all about the state. Early in the month we were all worried about crop and grass losses. Now that concern has primarily focused on the low-lying areas.

Having said that January's weather is not an indicator of the upcoming season's weather, I may as well share what the UW-Madison's Center for Climatic Research predicts. Sit down, please. Take the handkerchief from your pocket and get ready to dab the tears from your eyes.

Wisconsin has had a dry spell dating back to 1986 and, as you are well aware of, it really intensified last summer. The University of Wisconsin forecasters say it is likely to continue this year. They feel it isn't out of the question to say we're still in a dry phase. The real question is when it will end.

University of Wisconsin researchers Reid Bryson and Ed Hopkins have prepared a ten-year forecast of monthly precipitation for the region around Lake Michigan, which includes our Badger State (or at least most of it). There is credibility in their outlook — they were "in the right direction" 60 percent to 80 percent of the time over a large number of forecasts.

The center forecast calls for plenty of moisture through the winter and spring, but a drying out near the end of the 1989 growing season. Dry conditions for the lower two-thirds of Wisconsin during July and August are forecast. The northern areas are predicted to have near or above normal precipitation for the growing months.

Read this closely: a look toward 1990 sees the dry spell continuing. The only time Wisconsin has had consecutive drought years was in 1863 and 1864. Our driest growing season on record, which I'll testify to, was in the bicentennial year of 1976.

Since November of 1986, below normal precipitation has been recorded in 19 of 27 months.

One more note about the drought — please. This comes under the "How dry was it?" department. The winner of the Burlington Liar's Club WORLD CHAMPION LIAR title told a fib about the hot and dry weather that plagued us last year. Roy Griesbach from Appleton won the award with this whopper: "The weather was so dry this past summer that the only water one could buy was dehydrated in 16-ounce packages."

Some Wisconsin golf course superintendents might not see the humor in that winning entry — it's too close to the truth.

Last year I wrote a "Jottings" piece about the American chestnut in general and about the two juvenile chestnuts I have growing at Blackhawk Country Club. In that story I told you a little bit about the VPI chestnut orchard and how much I'd like to visit it someday.

Since then I've come into possession of a tremendously exciting bit of information. It comes from Hoyer Coulee, near La Crosse.

About a hundred years ago, a Wisconsin farmer named Martin Hicks planted nine seedling American chestnuts (Castenea Dentata). Although they're not native to our part of the country, they grow well here. The seedlings planted by Mr. Hicks prospered and were beyond the reach of the fungi that eventually killed all of the trees growing in the East.

The chestnuts grew, matured and reproduced. Today there are **5,000** chestnuts of various sizes growing on the ridge at Hoyer Coulee. I'll never know why I have not heard or read about them.

As exciting as it seems, it was a pending disaster that brought the Hicks chestnut stand to my attention. The dreaded blight has reached the La Crosse chestnut woods. The end result is assured.

The president of the American Chestnut Foundation, Phillip Rutter from Canton, Minnesota, says that the Hoyer Coulee is "the chestnut's last stand — you're looking at a resource with a limited lifespan. When the blight finishes its work here, this will be just like the Appalachians in the 1930s. These chestnuts will be dead."

The disease has given a new sense of urgency to scientists studying the chestnut tree. Since it is the finest naturally producing stand of American chestnuts anywhere, they had hoped to use it to help develop a blight-resistant tree which would restore the chestnut to its rightful place in American forests. Wisconsin forestry officials are trying their best to control the infection, but there seems little chance the stand will avoid the grim fate of nearly all the chestnuts before them.

A lot of the work of the American Chestnut Foundation involves the genetic "backcrossing" of the American chestnut with the blight-resistant Chinese chestnut. What they hope for is a strain of **Castanea** nearly like the American but with the resistance of the Chinese species.

I am praying for their success, and who knows. Maybe it will come about.

I do know that I am going to make a trip to La Crosse in early summer to try to find this wonderful collection of chestnuts, on the ridge near Hoyer Coulee.

Is golf the game of rich people? I guess the answer to this ancient and often-asked question lies in your definition of the word "rich." Here are some statistics from the National Golf Foundation that will help answer the question, regardless of your definition:

GOLFERS HIT THE GREEN	S Percentage of Americans in this income
Income Level	range who golf
Under \$10,000	3.8%
\$10,000-\$19,999	12.8%
\$20,000-\$29,999	17.7%
\$30,000-\$39,999	20.6%
\$40,000-\$49,999	18.1%
\$50,000-\$74,999	18.3%
\$75,000 and over	8.7%
SOURCE: National Golf Foundation	

I have always thought of Carl Sandburg as the Midwest's version of Robert Frost, despite the fact he was born near Ashville, N.C. Not only do their subjects and words have some similarities, but they even sort of looked a little bit alike. Anyway, for your springtime reading pleasure, here is a short verse by Lincoln's most famous biographer. It is titled "Spring Grass":

Spring grass, there is a dance to be danced for you.

Come up, spring grass, if only for young feet.

Come up, spring grass, young feet ask you.

Smell of the young spring grass, You're a mascot riding on the wind horses.

You come to my nose and spiffed me. This is your lucky year.

Young spring grass just after the winter,

Shoots of the big green whisper of the year,

Come up, if only for young feet. Come up, young feet ask.you.



That's right. For the second year in a row Palmer turf-type perennial ryegrass scored number one in the National Ryegrass tests conducted by the U.S.D.A. coast to coast:

U.S.D.A. National Perennial Ryegrass Test Turf Quality 1-9 (9 = Best)

Variety	2-Yr. Avg.	Variety	2-Yr. Avg.
Palmer	5.9	Derby	5.5
Gator	5.9	Yorktown II	5.4
Prelude	5.8	Cowboy	5.4
Repell	5.8	Pennfine	5.3
Tara	5.8	Diplomat	5.3
Premier	5.7	Regal	5.3
Citation II	5.6	Barry	5.2
Manhattar	n II 5.6	Delray	5.2
Blazer	5.6	Omega	5.1
All Star	5.6	Elka	5.1
Ranger	5.6	Manhattan	5.1
Birdie II	5.5	Citation	5.0
Fiesta	5.5	Linn	3.4
Pennant	5.5		

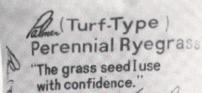
It's no wonder courses like Bay Hill in Florida, Shinnecock in New York, PGA West in California and Sahara in Nevada are only a few of those that are demanding the excellent performance of Palmer.

As a turf professional wouldn't it be nice to know you're using the best? Use Palmer.



"Kellogg's supplied us with Palmer and other quality seeds that we needed. Kellogg's personnel are experienced and their recommendations and service is excellent."

-Wayne Otto Supt. of Ozaukee Country Club



Unwold fet





Kellogg Inc. Seeds & Supplies 322 East Florida Street Milwaukee, Wisconsin 53204 (414) 276-0373

1-800-792-3504 ext. 492