



In 1904 Case built a new headquarters from a design similar to the Boston Public Library.

The elder Case bought one of the machines and Jerome spent six years custom threshing grain for farmers in that part of New York, as well as giving demonstrations and selling ground hogs to other farmers. Case knew the machine well and was able to adjust and repair them with considerable skill. Clearly, he had considerable mechanical ability.

Jerome must have seen, during those six years, the tremendous amount of exportable corn and wheat traveling the Great Lakes from the Midwest to the Erie Canal and foreign markets. No doubt he read about the opportunities for farming in the Midwest, including the Wisconsin Territory. It seemed the place for an experienced thresherman. Case made the decision to head west, but first enrolled in the Rensselaer Academy twenty miles west of his home and took a course (about six months) in engineering. Late in his life, Case reflected on how important those months of education were for him.



Jerome and Lydia Case built this large home on Main Street in Racine. It is privately owned today and divided into apartments.

Jerome traveled from New York on the Great Lakes – Erie, Huron and Michigan – with six ground hog threshing machines. His plan was to sell five of them to pay his way and use the sixth to support himself by custom threshing for farmers on the way to his destination of Rochester, Wisconsin.

History has it that Case was unimpressed by Chicago. He bought a team of horses and a wagon there, loaded the ground hogs and headed north. Things went according to his plan; Jerome sold five ground hogs in the eighty miles from Chicago to Rochester. The profits and his custom work left him with a tidy profit to get through that first winter in Racine County. He rented a room at a pioneer tavern in Rochester and became acquainted with a carpenter who also rented a room there.

Although the ground hog saved backbreaking mundane labor, it nevertheless dropped the grain, chaff and straw into one pile at the end of the machine. Case thought of improvements that would thresh and winnow – separate the

grain and chaff/straw with a fan. He wanted to design a machine that would do the entire task of threshing and separating in one operation.

The carpenter he roomed with at the tavern rented Jerome a workbench in his shop. Jerome had lucked out by moving to Wisconsin in the year of its first great wheat harvest. Luck was also with him because for the three years before his arrival Rochester was the home of Richard Ela, a manufacturer of fanning mills. He was making a hundred a year when Case arrived. The fanning mills were used to winnow the grain from the straw and chaff with forced air.

Case approached Ela, and Ela encouraged him to develop his idea of one machine to process grain. All that winter, spring and summer Case worked on a threshing machine, and he was frustrated by many problems. By the spring of 1844, he had built a machine he felt would thresh grain the way he wanted. The first trial set in a barn in Rochester was successful. He was invited to a farm



Case IH was at the GCSAA Conference this year. Their booth included this golf course size tractor/loader/backhoe and a skid steer.



I spent some time answering questions of their staff. It seemed to me they are contemplating building some turf equipment. My suggestion was a line of large area rotaries.



In 1976 Case manufactured a 1570 AgriKing to note America's bicentennial.



A display across the street from the stately 1904 headquarters is this display of tractors that speaks to today — New Holland, 1976 Case AgriKing and Case IH. CNH Global now owns Case.

less than two miles from Rochester and on a windy May day, powered by a two-horse tread, J. I. Case's threshing machine really worked. The grain came out a spout ready to be bagged, and the straw was blown into a pile.

All that summer Jerome worked to make the grain even cleaner, and in the fall he threshed much of the crop in western Racine County. Farmers asked him to build them similar machines and he knew he would rather build the machines than operate them as a custom thresherman.

Case needed a shop and water power if he was going to build threshing machines. The water rights on the Fox River in Rochester were tied up, so Case

loaded his tools and headed to the Root River in Racine. He was able to rent a small shop on the riverbank and was in business. He worked from there for three years, filling local orders for threshers.

In 1847, J. I. Case built a three story brick building was 80' by 30'. Although it was also on the Root River, he also installed a steam boiler engine for power so that he wasn't dependent on water levels for power. He added employees and by 1848 he was Racine's largest industry.

Jerome married Lydia Ann Bull in 1847 and for at least two years after that the frugal Case traveled by stage, boat or on foot, not yet able to afford his own horse and carriage! He traveled Wisconsin and most of the Midwest in those early years not selling machines — they were so good they sold them-

selves — but rather trying to collect money owed him!

From the first, one thing Case did was back his machine's quality. Frequently he went to the unhappy farmer himself to fix a balky thresher. He would not put up with what he called "murdering the reputation of a Case machine." My reading tells me that although Jerome likely wasn't a warm and gracious fellow — many said he was gruff and abrupt — he was as absolutely honest as a man could be and had enormous pride in anything that carried his name.

I wrote about my favorite J. I. Case story a number of years ago in *The Grass Roots*. Here it is again.

A farmer near Faribault, Minnesota was anticipating an excellent harvest of wheat in the early autumn of 1884. The reaper



J. I. Case's brother-in-law and business partner, Stephen Bull, is also pillowed in the Mound Cemetery. Other family members rest there as well.



Jerome Increase Case Mausoleum, located in Racine's Mound Cemetery

had done a good job, the bundles had ripened in the shocks and all appeared ready for a successful threshing. The only problem was the threshing machine itself. It was belted to a big traction steam engine, which was working well. But the new J. I. Case threshing machine was not. The grain wasn't coming out clean, and it was using way too much steam power.

The farmer had called the dealer. The dealer had come out to the farm, made adjustments, but couldn't get it to work like it should.

So the dealer telegraphed the J. I. Case office in Racine and they sent their best field mechanic out to the farm. He had no luck either, despite considerable swearing. He telegraphed the home office and recommended replacing the machine with a new one or refunding the farmer his money.

The reply came back from Racine: AM TAKING NEXT TRAIN. MEET ME FARIBAULT. J. I. CASE. The man himself was heading west.

News traveled through the

neighborhoods around there like wild fire. Case arrived at the farm to a considerable crowd of farmers who wanted to see the great man.

Case was 65 years old at that time, white beard and white hair, ruddy face and coal black eyebrows. He stood tall and peered at the machine with his name on it with steel blue eyes.

Case removed his coat and hat, rolled up his sleeves and went to work. An hour passed and he order the thresher started. He pitched bundles into it himself; it didn't work right.

He worked another four hours, straight through, starting and stopping the threshing machine many times. It still didn't work.

He turned to the farmer. "Have you," he asked, "a sizeable can of kerosene handy?"

The farmer returned with the kerosene, which Jerome used to douse the machine from one end to the other. Then he struck a match and lit the threshing machine on fire. Legend has it the fire could be seen for miles and Case stayed until it burned to the ground. The farmer received a new machine.

During his lifetime Jerome saw his company design and build

many farm implements and steam engines. He invested in Great Lakes cargo ships, was involved with banking and real estate, ranches and cattle operations, and was successful as a horse breeder. His trotter Jay Eye See was so successful and well known in America that Currier and Ives painted it.

Jerome Case died in 1891 when he was 73 years old. This past fall I attended, as I always do, the Rock River Threshere. Case equipment was featured and it gave those of us there the chance to see one each of most of the early agricultural implements Case manufactured.

There have been formidable changes in the company since J. I. Case passed away. But Case to this day still produces some of the best tractors and equipment in the world, still in Racine.

Books have been written about the history of Case and make for fascinating reading. From the story of how Wisconsin's Old Abe became the company trademark to the success of those many lines of equipment, the story continues today.

And if you are Mike Handrich, you merely have to sit back and listen, spellbound, to Mr. Campbell. ✨



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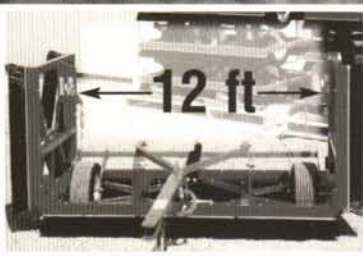
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The Shape of Things to Come

By **Bob Vavrek** USGA Agronomist North-Central Region

Who knows what the 2002 season will bring? In general, the North-Central Region has experienced exceptionally mild winter weather. The threat of winterkill or severe snow mold injury has certainly not been keeping most superintendents up at night. However, the recent blast of snow and arctic air may or may not be a cause for concern depending on how much insulating snow cover arrived prior to the frigid temperatures. True to form, the potential for winter injury always seems to peak just prior to the opening of the golf season – a time when the turf may have already broken winter dormancy.

The following are several turf management concerns I will be monitoring closely this season during Turf Advisory Service visits.

The spread of Japanese beetles across Wisconsin and into Minnesota

Damaging populations of beetles have already become well established in localized areas of Wisconsin. Damage

from adults feeding on ornamentals and trees along with grub damage to turf has been seen on courses around Lake Geneva, in the Madison area, in Eau Claire, and even as far north as Minneapolis, Minnesota. It's only a matter of time before beetles inhabit and cause damage to courses between these sites.

Keep in mind that commercially available Japanese beetle traps, such as Bag-a-Bug, are an excellent tool to monitor the presence of Japanese beetles, but they are not an effective method to control these pests. Time and again I have seen a picket line of traps placed along the perimeter of a golf course with the intent of catching the adults before they enter the property. At best you will be protecting the neighboring golf course from damage by attracting all of the nearby beetles to your site. On the other hand, if you haven't had a beetle problem in the past, a well placed trap on or near the course can help document the arrival of the pest and











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New Diseases

I'll be on the lookout for several diseases that have caused a considerable amount of turf injury on numerous golf courses across the eastern part of the country over the past several years.

Crown rotting anthracnose – *Colletotrichum graminicola*

Foliar anthracnose, caused by the same pathogen, is relatively easy to diagnose and control. The signs of the disease on the foliage are black fruiting bodies called acervuli that often have protruding spines (setae). The acervuli and setae are visible with the aid of a hand lens.

More serious damage occurs when the pathogen infects the roots and moves to the crowns of the plants. The base of the stem turns black, rots and the plant dies. Controlling this form of the disease is difficult due to the problem of getting the fungicide to the part of the plant where the damage is occurring. Once the crown area is infected the plant will not recover; therefore, fungicide applications do little more than stop further turf loss.

In the east, the severity of this disease has often been associated with intense putting surface management practices such as ultra-low mowing heights, frequent double-cutting, excessive rolling, etc. Entire greens under such stress have been devastated by this disease. Furthermore it is very difficult to control when the fungus is found in the basal rotting stage. Under similar aggressive management practices there is every reason to believe that crown rotting anthracnose will become a problem in the upper Midwest.

Bacterial wilt of *Poa annua* – *Xanthomonas campestris*

If you're old enough to remember the damage caused by bacterial wilt to Toronto creeping bentgrass greens during the early 80's then you are already familiar with the type of injury bacterial wilt can inflict on *Poa annua* greens under the right conditions. It's the same species of bacteria, but now it has been documented on a number of courses that the pathogen is causing injury to *Poa annua* on greens. The symptoms can be similar to anthracnose and the presence of bacterial wilt needs to be confirmed by a pathologist.

The mechanical damage caused by frequent top-dressing or aggressive mowing operations such as double cutting, grooming etc. will wound the plant and it is believed that the wounds create the entry points for the bacteria. Similar to crown rot anthracnose the greens that are under stress from intense management practices, usually employed to increase green speed, are the greens that thin out from bacterial wilt. The take home message: we are pushing putting surface turf over the edge when striving for unreasonable green speeds for day-to-day play.

Bentgrass Dead Spot – *Ophiosphaerella agrostis*

The third new disease that will likely be diagnosed in the Region soon is bentgrass dead spot. The pathogen has been documented causing injury to relatively new sand based greens in the Chicago area. This fungus can affect bermudagrass as well.

Talk about a disease that will be difficult to diagnose in the field. The symptoms are easily mistaken for dollar spot lesions or unrepaired ball marks...and there is no shortage of either on just about every green in the Region. So, if you think you have bentgrass dead spot on your 20 year old bent/Poa greens, you probably have ball marks or dollar spot. However, this is definitely a disease to watch for on a new golf course.

Doing more with less.

On a final note, many course managers are being asked to make do with minimal or no budget increases this season and some courses have had their operating budgets cut. I will be looking for helpful hints regarding how to tighten the belt and still provide golfers consistent playing conditions during TAS visits this season. In fact, this will be the topic of the Wisconsin Turf Symposium next November.

For example, the budget might be reduced in the area of fungicide applications for fairway turf. You may have to squeeze every ounce of control from a few well-timed treatments. Consequently, using the right spray nozzle and perhaps adjusting the spray volume to optimize the effectiveness is necessary. Spray volume is especially important when attempts are made to control crown rot anthracnose. Up to 5 gallons of spray volume per 1000 sq. ft. of turf is recommended to ensure that the fungicide reaches the target. It will take longer to spray greens and tees, but in the long run save money by optimizing the effectiveness of the fungicide. These are the kind of money saving tips that will be shared during TAS visits, web site updates, and at various presentations I make throughout the season. ♣



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The Wisconsin Seasons Merge

By Monroe S. Miller, Golf Course Superintendent, Blackhawk Country Club

Winter and spring, for a period in March, seemed to have reversed themselves. It happened again in mid-April, only spring and summer traded places at times. Many parts of the state experienced mid-80s to over 90 degrees F. With the ample soil moisture many of us had, plant life exploded. Suddenly, the greens were slow, the roughs were long, and yardage markers on irrigation heads in fairways were difficult to find. But the storms rolled through and the temperatures dropped 45 degrees F and we were right back where we should have been. By the weekend of April 20/21 (UW spring football weekend in our town) there was significant snow in most areas of Wisconsin!

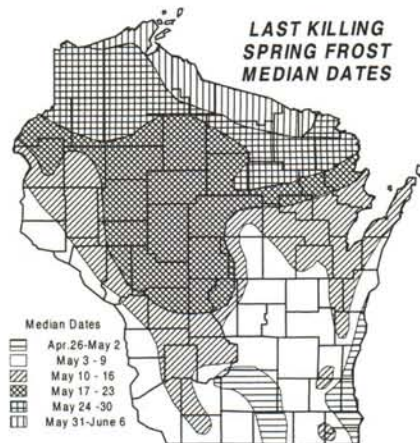
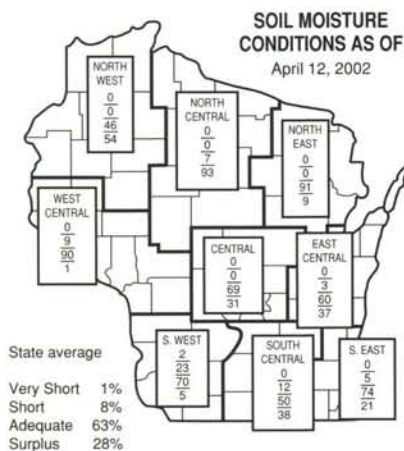
But mostly, it was a glorious spring. The winter was in no way harsh, although we could have used more snow in the south. On the other hand there isn't much snow mold damage if there isn't much snow and courses were nearly perfect for opening day.

Bluebirds returned to our course in early April along with a mating pair of hawks. The daffodils and crocuses and forsythia have never appeared healthier. Soon after came the tulips and bluebells and dogwood, and the fat buds on the lilacs forecast an abundant crop for that beloved plant.

Spring is so often a day-by-day thing in Wisconsin. You can be in the middle of a frost or cold rain or snow flurries and dream of an evening by the hearth and a big fire. Two days later you are in short sleeves because of warm mornings, hot and humid afternoons and balmy nights. The variability adds to our impatience to get the golf courses going.

But by now, we are close. After a few outings and member events we will be face to face with the summer solstice and the days will actually begin to shorten. Nature is forever on the move, the changes day by day are endless and we are constantly reminded that there is no end to the cycle of seasons. Maybe that is why so many of us have enjoyed this profession for so long.

Graphics from the Wisconsin Ag Stats Service and the U.S. National Climatic Data Center are here for your information and records.



She's headed for fame and glory and riches! Jackie Zurawski has joined an elite group as a published book author. Titled "The Adventures of Lily and Daisy," Jackie's story can be found in the Fisher Price Ready Readers Stage Two book.

Jackie, whose husband Pat is the golf course superintendent at Camelot Country Club in Lomira, submitted a number of stories to editors over the years before being selected by Fisher Price. I have no doubt her creative writing will result in many more children's stories.

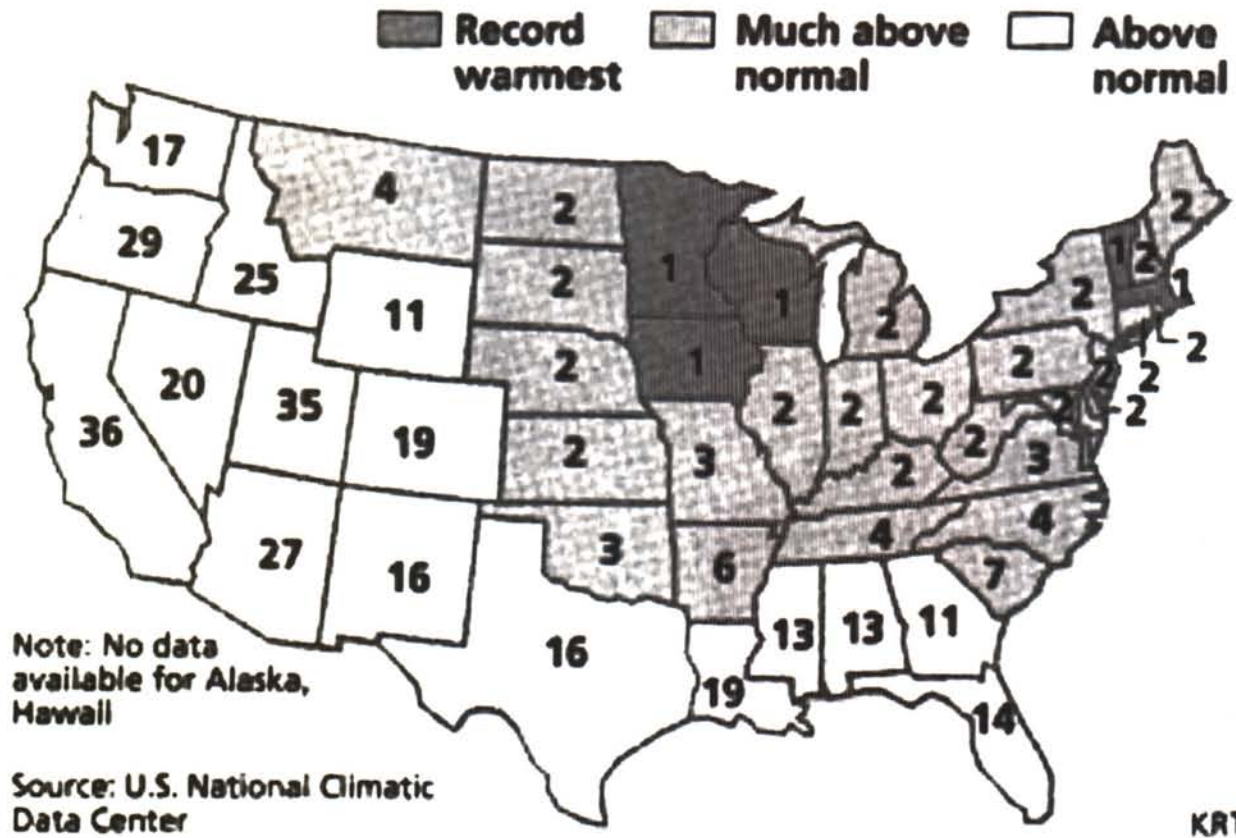
Congratulations!

There has been a lot of concern in recent years about the water level of the Great Lakes. Some of our beautiful Wisconsin golf courses are on the shores of Lake Michigan.

Water levels were at their lowest in 35 years. They have fallen three feet since 1997. In some places you can walk out 60 or 70 meters on dry land that is normally well under water. But a new assessment shows that the level of Lake Michigan should rise about eight inches from last year. The higher level is due to a rainy autumn and a normal snow pack around the Lake Superior basin.

Sadly, there is another passing to report. Dr. Eugene B. Smalley, emeritus professor of plant pathology and forestry at the University of Wisconsin - Madison, died on March 25th. He was 75 years old.

Dr. Smalley was a well-known expert on Dutch Elm Disease and for those superintendents who lived



The winter past was the warmest since records began in 1895. State temperatures from November 2001 to January 2002 ranked with previous winters (2=2nd warmest).

through that awful epidemic, he and Dr. Gayle Worf offered treatment programs for infected American Elms.

Smalley was a world-renowned expert on the disease. He collected elm seed from all over the world and developed resistant strains of elm trees from them. They were patented by the Wisconsin Alumni Research Foundation (WARF) and the most famous (to my observation) is the Autumn Sapporo Gold Elm. Like many other Wisconsin golf courses, we planted one of the Autumn Sapporo Gold trees. We also have an American Liberty Elm that we planted behind the 15th green. This was purchased from the Elm Research Institute in Harrisville, New Hampshire during a visit I made there in the mid-1980s. Dr. Smalley inspired that organization

as I witnessed personally when I mentioned his name to staff people at the ERI.

Dr. Smalley assembled a substantial collection of trees from his breeding program. You can still see them, growing on the UW – Madison’s Arlington Agricultural Experiment Station, just off U.S. Highway 51, north of Madison.

World known for his work with elms, Dr. Smalley traveled to England in 1980 where he and Prince Phillip planted a disease-resistant elm on the Windsor Castle lawn.

The Wisconsin Sod Producers Association recently announced a change in the way sod is sold. Starting with this 2002 season, the industry will be selling sod by the

square foot, rather than the traditional square yard that we have all known.

All residential and commercial real estate lots are sold by the square foot; many of our golf course projects are designed by the square foot. Conversion to sodding these areas is direct when the sod is sold by the square foot.

Actually, the Midwest is one of the last areas to convert sold sales to the square foot. The Midwest Sod Council (WI, IL and IN sod farms) is leading the way in letting the public know about this sizing change.

If you have any questions, call you Wisconsin sod supplier; he will help you out.

Mid-May each year, regardless of how busy I am, I make the trip back