

Turfgrass Nitrogen Sources —

(Continued from Page 23)

was picked up at a mowing height of 3/16 inch in a study conducted in England. Mowing without grass catchers would prevent such removal, but breakage could still occur. High rates should be avoided where breakage due to mowing or traffic could occur. The Lesco Elite SCU is finer than the product tested in England, and pick up with it should be minimal.

Plastic-coated fertilizer: Grace-Sierra Horticultural Products Company uses the Osmocote process to produce plastic-coated fertilizers. In this process, plastic coatings (also called resin or polymeric coatings) are applied to soluble sources of N, P and K. Plastic-coated urea made by this process contains 39 or 40% N, with the 39% product being slower release due to a thicker coating. For release to occur, water passes through the coating and dissolves the fertilizer salt. This causes pressure that swells the capsule, and the dissolved salts diffuse out through enlarged pores in the coating. Different coating thicknesses are used to obtain different release patterns. The thicker the coating, the slower the release. Release increases with increased temperature. If coatings are ruptured or cracked by mechanical damage or due to prolonged, excessive drying, release rate increases. The release rate is not significantly influenced by soil moisture levels (from wilting point to field capacity), volume of water applied, soil pH or microbial activity. The high cost of these products has been a dominant factor in delaying their acceptance for turf fertilization. They are often used on greenhouse and nursery plants.

Pursell Industries' reaction layer coated urea (RLCU) is a plastic-coated material made by sequentially applying liquid monomers to urea granules. The monomers react to form a polyurethane coating and also chemically bond to the urea surface. Depending on the coating thickness, RLCU has N contents of 41 to 44%. The N release rate from RLCU is increased with increasing temperature and with decreasing coating thickness. As soil moisture content increases, N release increases only slightly. Other nutrient sources are also coated with this process. Products manufactured using this process are marketed under the name of POLYON fertilizers.

Another plastic-coated urea is Estech's Escote, which has a coating of plastic containing talc. Release rate is controlled by the amount of talc added. Escote products are used for ornamental fertilization, and some have been used experimentally on turfgrass.

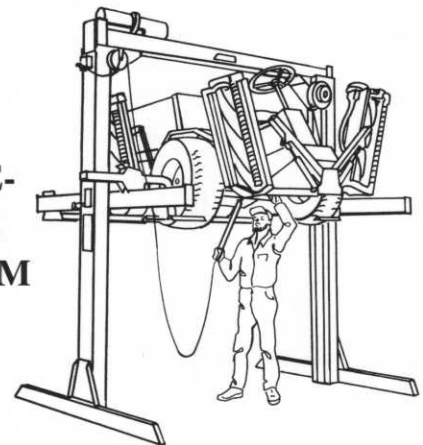
A number of experimental plastic-coated ureas and sulfur-coated ureas have been evaluated for turfgrass fertilization. Some of these products do not provide a slow-release of N, but they do offer some safety from the standpoint of fertilizer burn. Thus, not all coated fertilizer can be considered slow-release.

Oxamide: Oxamide is a N source that has been known for over sixty years. High production costs have kept it from

being produced commercially. A renewed interest in this material as a slow-release N source has resulted in recent studies on turfgrass. Oxamide contains 31.8% N, and the chemical formula is $\text{NH}_2\text{-CO-CO-NH}_2$. Release of N is by hydrolysis reactions and more rapid release is favored by finer particle size and warm temperatures. Our results with this material have shown a similarity in response following application (especially with larger granule sizes) and adequate release in cold weather to promote good green color. Fine oxamide (less than 0.25 mm) has given quicker response than granular oxamide (1-3 mm), but release from the fine material was slower than with soluble sources.

Melamine: Another older slow-release source that has gained some attention in recent years is melamine. Melamine (2, 4, 6 triamino- 1, 3, 5 - triazine) is a long lasting, insoluble N source containing 66% N. Melamine and urea have been combined to produce N fertilizers known as "Super 60" nitrogen fertilizers. Three formulations are currently available and are made by utilizing various ratios of melamine and urea. Ratios of 1:3, 1:1, and 3:1 yield 50-0-0, 55-0-0, and 60-0-0, respectively. The lowest N content (50%) reflects the highest amount of urea used, and this product will give the greatest initial response. The initial response with each is due to the urea component. Melamine begins to release N after a delay of several months. The "Super 60" fertilizers can be applied dry as granules or in water. In fluid applications, the urea dissolves and the melamine is a suspended solid.

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Alan Crittenden	Crittenden Press, Inc.	F
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RECLASSIFICATIONS—OCTOBER 9, 1995

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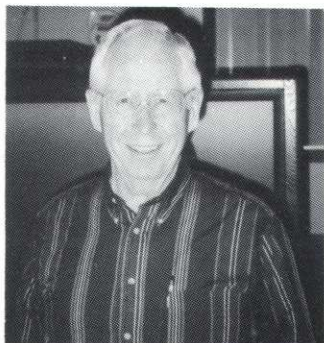
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A REPORT OF RETIREMENT

By Allen L. Gerdin
MGCSA - Life Member



My involvement with the turf industry began in 1960 with the responsibility of introducing a line of fertilizers to the golf courses of the Upper Midwest. This led to joining the sales staff at the former R.L. Gould Company, and eventually North Star Turf, Inc. A plaque hanging on my office wall states that my membership in the MGCSA began January 1, 1966. Semi-retirement has been my privilege for the past two plus years. Working with and for a professional group of people involved in the turf industry has been a very rewarding experience.

Retirement (though not 100%) is perhaps keeping me busier than before. During the past 19 years, I have been involved with Rotary International Youth Exchange. On July 1, 1994, I became the chairperson of the Rotary Youth Exchange for two Districts of Rotary International, which includes most of Southern Minnesota and part of Western Wisconsin. We coordinate the exchange of 50-75 students annually, for a full year of study, with about 35 countries throughout the world.

In April and May of this year I led a Rotary Group Study team of four business and professional people to Sweden. This group interacted with Swedes of similar professions during a five-week period, to learn ways of improving their own skill. Our study area was in the southeastern part of Sweden.

Singing with the American Swedish Institute Male Chorus, also, keeps me involved. We practice weekly and sing at 20-30 performances a year. Some committee and board obligations in the chorus have been very fulfilling. Just recently we have 'cut' a tape and CD. This past summer we had a concert tour in Sweden during the first two weeks of June. Consequently, my trip to Sweden, for Rotary, expanded to an eight-week stay in the country of my father's birth.

Retirement is rewarding in many ways, especially in the way of a retirement gift from my daughter. She took me on a trip to Brazil during the first three weeks of this past September. We toured several parts of the country, including a fifty-mile boat cruise of the Amazon River at Manaus, plus a hike in the jungle. Also, we had the privilege of eating Piranha instead of being eaten by them.

During full-time employment many leisure activities played a distant second place in my life. In retirement there has been time to become involved on a 'seniors' golf team. Poor golfing scores of the past are slowly but gradually improving enough to create a desire to continue playing the great game.

The greatest drawback to retirement is the lack of close contact with the superintendents and crew members that I called on over the years. I have many wonderful memories of hundreds of people. Many became very special friends that I will cherish forever.

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EDITOR'S CORNER

By Tom Johnson
New Richmond Golf Club



Chop, blow, vacuum time! Fall, like spring, sort of sneaks up on us each year. Coming back to the course Monday morning after a weekend off was when fall snuck up on me. Leaves down all over the place brought on that sense of urgency to clean up all those loose ends before snowfall. Get that drain tile in, build that tee you said you'd do, call that final sod order in and order that topdressing. Let's see, did I get my request in for that compressor to blow out the irrigation system? Turfgrass disease problems are just a distant memory. How easy growing grass would be if we had fall weather all the time! Bring on the white stuff!

* * * *

There are two kinds of stores I like to browse around in: Hardware stores and fly fishing shops. There's always something that you can use or absolutely must have. The last visit to my favorite fly shop added some 'stuff' to my already overloaded fishing vest. But it also gave me an opportunity to discuss with the owner of the shop how pesticides and fertilizer are used on the green spaces. The owner's concerns primarily were the leachates getting into streams and how they affect water quality. His impression was 'maybe' golf courses were harmful to the environment. The key word was maybe, and after our discussion he had at least some facts rather than hearsay and misinformation. In fact, he just found out that you can actually get a degree in turf management! There are a lot of people who could go either way on the issue of pesticide use, so whenever possible they might as well get the correct information. The conversation reinforced to me, that we have a responsibility to our environment and to our profession to use pesticides wisely.

* * * *

The USGA Senior Women's Amateur Championship was held at Somerset Country Club last September and was a great success. **Jerry Murphy** reported the contestants enjoyed the course and had terrific cooperation from all those involved in making that event possible. Many MGCSA members or their employees helped out during that week and Murph appreciated that very much. You know what Jerry? We appreciated the opportunity to help out!

* * * *

Congratulations to our friend and U of W Turfgrass Professor, Dr. Frank Rossi and wife Barbara who had a baby girl, July 28th! Nicole was 7 lb., 13 oz. and 21 inches. Easterner turned Midwesterner, (forget about the Mets), Dr. Rossi has been a great asset to the UW Madison Turfgrass program, and has spoken at our turf conferences.

* * * *

Long time MGCSA member, Gerald Bibbey, as of September 29th, is enjoying retirement. Gerry has been a member of our association since 1971 and plans on attending monthly meetings so he can laugh at the rest of the working fools. He was superintendent of Keller Golf Course from 1974 until 1982 when he took over the helm at Goodrich where he stayed until retirement. Congratulations and good luck!

* * * *

Got any ideas for *Par for the Course?* GCSAA is looking for ideas.

* * * *

Is it Pebble Beach or Pebble Creek C.C.? People in Becker couldn't be any happier with the additional nine and its new pond and waterfall. **Cary Femrite** reports a successful year with now 27 holes of golf in spite of having 17 days of over 90 degrees. They have installed a Course Aleret Lightning System which is operated by the clubhouse with a beeper pager. Cary said it has worked out very well. It sounds like in the future those systems will have to include strobe lights for the hearing impaired.

CAUCUS

On Thursday, Dec. 7, 1995, there will be a MGCSA caucus to discuss various GCSAA activities. This will take place at the Minneapolis Convention Center at 1:00 p.m.

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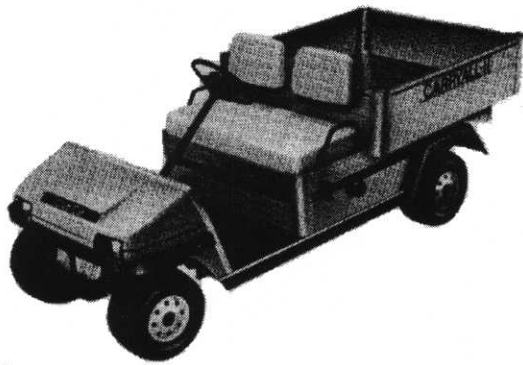
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