

CHIPS & PUTTS

Founded in 1936 OFFICIAL PUBLICATION OF THE POCONO TURFGRASS ASSOCIATION

VOL. 3, NO. 6

LESSONS IN LIMESTONE.... By David A. Jackson

With all that is known today about the physiology of turfgrass growth and disease processes, it is surprising to see that many professionals understand little about the effect of limestone on turf health. Perhaps this is because unlike fertilizers and pesticides which require a thorough technical understanding of both product and process, limestone is considered rather "low tech". Therefore, the effects of soil pH on turf health are often overlooked.

Simply stated, pH is a measure of acidity or alkalinity. The lower the pH, the higher the acidity. The higher the pH, the higher the alkalinity. Specifically, pH is scientific shorthand for measuring the concentration of hydrogen ions. pH effects plant growth and health by affecting the absorption of important nutrients such as nitrogen, phosphorous, and potassium. The ideal pH level for turf ranges from 6.5 to 7.0. Levels that are higher or lower cause nutrients to become less available. That is, not that the nutrients aren't there, but that the plant can't use them.

How Soil pH is Affected

Plants, including turfgrass, remove nutrients from the soil as they grow. They also produce hydrogen. As hydrogen builds up, pH goes down, and the soil becomes naturally acidic. Many other factors are also at work reducing soil pH. Rain washes away the plant nutrients mentioned previously, as well as calcium - Mother Nature's great pH neutralizer. Other factors which affect soil pH are acid rain and build-up of grass clippings. Fertilizers create a "Catch 22" effect. They replenish important nutrients while simultaneously causing a pH imbalance which renders those nutrients unavailable.

The most noticeable result of soil pH imbalance is poor turf growth and appearance. This prompts fertilization which, as just discussed, can help to make the problem worse. Because unbalanced soil pH affects plant growth, it also has the potential for decreasing the effectiveness of systemic pesticides, which can increase the risk of disease and pesticide sensitivity. Moss and hard-pan soil are also signs of poor soil pH. Mushrooms are thought to be a sign of low soil pH, but are more often indicative of dense shade and poor drainage conditions.

Limestone Restores Natural pH Balance

Limestone, which contains calcium, naturally balances soil pH. When used on a regular basis, limestone replenishes the balance that we, as well as Mother Nature, take away. Unlike some other turfgrass treatments, limestone doesn't react with fertilizers or pesticides. Limestone is also nonphytotoxic, so it can be applied any time of year. Many professionals prefer Fall for their limestone applications because the freezing and thawing of the ground acts as a mechanical process to work the limestone into the soil. However, it is appropriate to apply limestone throughout the year as needed to correct soil pH.

The Calcitic/Dolomitic Debate

In 1928, Thomas Alva Edison, the great inventor, was mining limestone in Sparta, NJ, for use in his laboratory. He noted that there were two types of limestone: that which is high in calcium (calcitic), and that which is high in magnesium (dolomitic). Of course, all limestone contains both components.

After performing his own studies, Edison wrote in a letter to an associate: "A high calcium, finely pulverized limestone is superior to a high magnesium pulverized product." His findings were

(Continued on page 3)





AUGUST 1997

President's Message......

The rains have come and gone through the Wyoming Valley without much landing here at Fox Hill C.C. Every line of storms has traveled just to the south of us all season. I am sure as soon as we begin aerification, the sky will open up and make that process more of a challenge. The last good rainfall we received was around June 25. Thank God for irrigation - our pumps have been running around the clock these past few weeks. One of the positive things this season was the cooling off periods. We've been able to step back and catch our breath every once in a while.

It has been a very trying year for many of us, especially the Board of Directors of the PTGA. We have had numerous discussions at meetings and on the phone over the past few weeks, questioning our commitment to the PTGA and testing our personal relationships. The last thing I want our Board to do is lose focus of why we initially got involved with the Association. I think we have come a long way! We are no longer a good ol' boy Association amongst our colleagues throughout the state. We do, however, need continued support and guidance from you. I have always asked you to give us your comments, both positive and negative. In the upcoming mailings you will find a brief questionnaire regarding the status of our Association. I ask you all to give us some input on where and what you would like the PTGA to do for you, if the PTGA is providing you with enough information, etc.

Moving forward, Hal Parr is currently sitting on the GCSAA Chapter Relations Committee and has attended a few meetings throughout the season. Hal will be representing the PTGA at this year's Chapter Relations Meeting at GCSAA Headquarters in September. We look forward to Hal's reports.

Our Secretary/Treasurer Mike Vella has landed a job! He is the new course Superintendent at the Old Kinderhook Golf Club outside of Albany, New York. **Congratulation to Mike!** Unfortunately, this means Mike will have to resign from his position. I know Mike was handed quite a mess when he was appointed as Sec./Treasurer two years ago. (I was the previous Sec./Treas., and I had no idea what I was doing.) Mike, we thank you for the work you have done for the PTGA, and wish you the best.

It is that time of year again. We are looking for a few good men/women who would like to run for a position on the Board of Directors of the PTGA. If there is anyone out there who is willing to dedicate a few hours per week to keep this Association moving, please contact Jeff Peters to get your name on the ballot.

Ron Garrison, CGCS

From the Editor's Desk.....



As promised, cooler temperatures and more precipitation is just around the corner. Those were my parting words in last month's newsletter. Sure enough, here it is mid-August and the forecast is for rain, along with a Canadian cold front to take us through the weekend. Ah, the Season's end is not far behind. With these thoughts in mind, I guess it is also time to begin thinking about conferences, trade shows, employment opportunities, and the importance of balanced soil fertility - all of which are included in this issue of *Chips & Putts*. Enjoy — Fall Golf is the golf I enjoy most.

Scott A. Schukraft, Editor



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confirmed in a study performed at the Ohio Agricultural Experiment Station and reported in the November 1943 issue of the Journal of the American Society of Agronomy. In this study, the pH neutralizing power of the calcium and magnesium components of limestone were calculated, finding that the higher the level of magnesium, the slower the rate at which limestone particles dissolve. The study concluded that dolomitic limestone is less active than high calcium limestone, especially in shorter time periods when you want the limestone to work

Four Forms of Limestone

As limestone popularity has grown, so has the number of available forms. Thomas Edison was right in using finely pulverized limestone. This form is crushed to such a fine powder that it becomes immediately available to the soil and turf upon application. However, pulverized limestone is also very dusty. For this reason, granular limestone was developed. Because granular limestone is a granule rather than a powder, the trade-off is a slower release in return for a cleaner application. Pelletized limestone is designed to offer the best of both worlds. Pelletized limestone begins as pulverized limestone, giving it the same quick release property. Natural materials are used to bind the powder into small pellets. The pellets reduce dust during handling and application, and break down to the original powder with the slightest soil moisture, such as dew. The fourth form is a limestone slurry used by farmers. The slurry is made by combining water and pulverized limestone, and is broadcast sprayed onto Because the slurry has a plants. relatively low limestone concentration, it is less practical for home lawn use.

The Effect of Pellet Size On Performance

Just as the ratio of calcium to magnesium affects limestone activity, so does particle size. The finer the pulverized particle, the faster it works, and the greater the effect it has on soil pH. Typical pelletized limestones start with a powder where the majority of particles can pass through a 100-200 mesh screen (approximately 150 microns).

Even in its finished form, pelletized limestone becomes active in soil faster than granular limestone. Research shows that within 3 months, over 82 percent of pelletized limestone becomes active in the soil compared to 63 percent of granular limestone. After a year, granular limestone still hasn't caught up (89 percent versus 92 percent respectively), and after four years, they're still not completely equal.

The thing to remember about limestone is that quick release is the key when seeking to counteract poor soil pH and green-up the grass - particularly when dealing with homeowners who won't wait until next season, let alone next year, to see results.

A New Advancement In Pelletized Limestone

Recently, a new process for producing pelletized limestone was developed which relies upon Thomas Edison's work over a half-century ago. It begins with fine pulverized calcitic limestone crushed by a machine designed and built by Edison in Sparta. This pulverizer creates a powder that is twice as fine as many other products, with most particles passing through a 400 mesh screen (approximately 38 microns). This provides nine times the number of particles per-cubic-inch compared to products using a 200 mesh screen, and 2.5 times the surface area to provide better, faster, pH neutralization. Next, the high-tech equipment takes over; mixing the calcitic limestone with a natural biodegradable woodsap binder, and joining millions of particles into a single, near-perfect spherical pellet that provides consistent flow and easier handling. The result is a product with improved bioavailability, optimal spreadability. pH-neutralizing and power. Professional landscapers and lawn care operators will have access to this new technology this Summer. Applying limestone any time of year makes good sense for achieving balanced soil pH, healthier plants, and better results from fertilizers and pesticides.

David A. Jackson is Vice President of Sales and Marketing for Lime Crest Corporation. Article printed with permission by Turf North, July 1996 issue.

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1997 CALENDAR OF EVENTS

AUGUST 18, 1997 - PTGA Clambake Blue Ridge Country Club Palmerton, PA Paul Weiss, Host Superintendent

SEPT. 16, 1997 Philadelphia Paupack Hills Golf and Country Club Greentown, PA Mark Monahan, CGCS, Host Supt. Speaker: Dr. Peter Landscoot, Penn State

OCTOBER 6, 1997 -MET Area Team Championship Country Club of Darien Darien, CT Tim O'Neill, CGCS, Host

OCTOBER 7, 1997 -

PTC Valentine Tournament Huntsville Golf Club Lehman, PA Scott A. Schukraft, Host Supt.

OCTOBER 1977

Split Rock Country Club Lake Harmony, PA Scott Seidel, Host Superintendent

NOVEMBER 4-6 - Penn State Golf Turf Conference, Nittany Lion Inn, State College, PA. Contact Peter Landschoot, Dept. of Agronomy, 116 ASI Building, University Park, PA 16802, Tel. - 814-863-1017 or PTC -814-863-3475.

NOVEMBER 5-8 - New York State Turfgrass Association Turf & Grounds Exposition, OnCenter, Syracuse, NY, Tel. - 518-783-1229. Keynote speaker will be Joe Theismann, Super Bowl quarterback for the Washington Redskins and ESPN football analyst. **DECEMBER 9-11** - New Jersey Turfgrass Expo '97, Trump Taj Mahal Hotel, Atlantic City, NJ Sponsored by the New Jersey Turfgrass Association

DECEMBER 9-12 - Ohio Turfgrass Foundation Conference and Trade Show, Columbus Convention Center, Columbus, OH





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GCSAA's 69th International Golf Course Conference and Show

> February 2-8, 1998 Anaheim Convention Center Trade Show: February 6-8

PESTICIDE LICENSE INFORMATION

Core Exams will be closed book after October 1, 1997. Category Exams will be closed book as new study materials are completed.

Pesticide Update Meeting information by FAX or Phone

There is a new state wide service to aid certified applicators in locating open meetings approved for pesticide recertification credits. These services are provided by the Department of Agriculture in cooperation with the Penn State University Offices of Pesticide Education and Telecommunications.

FAXBACK SYSTEM 814-865-1636

Dial the above number from a FAX machine and listen to the voice prompt. Press "1" for Pesticide Information System. Select the Region "1 through 7" (see map), or "8" for Out-of State Meetings. Press the Start button and the fax will be on its way to you.





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This service is available free of charge. You must call from a touch tone phone or be able to switch to touch tone from pulse dialing after you connect to the system. Listen for the voice prompt and select "1" for Pesticide Information. Select the Region number, "1 through 7" from the map, or "8" for Out-of State. The voice prompt will then ask you to Select the Category: 00 = Core; 01, categories you need. A listing of all meetings scheduled for that category will be read in alphabetical order by county and date.



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SUNSCREEN, ANYONE?

The Occupational Safety and Health Administration (OSHA) has declared sunscreen part of its personal protective equipment standard. Employers may be required to provide sunscreen to employees to guard against overexposure to the sun's radiation while on the job. Employers can also provide other protection, i.e., long sleeved shirts and widebrimmed hats. Sunscreen is enforceable by OSHA only if there is no other effective form of protection available.







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GOLF COURSE SUPERINTENDENT POSITION

Hampshire Country Club Mamaroneck, NY - 18 hole private club, 17K rounds, Devereaux Emmett design. 3 years experience as head supt. or 5 years as asst. required. Degree in agronomy a plus. Pesticide license mandatory. Salary & benefits comm. w/exp. and qualifications. Health, dental and life insurance, dues, vehicle provided. S/R to Green Supt. Search Committee, Hampshire Country Club, 1025 Cove Road, Mamaroneck, NY 10543, Fax: 914-698-2559, Available immediately.

ASSISTANT POSITIONS

Penn National Golf Club, Fayetteville, PA - 36 hole public resort course, 55K rounds, \$750K budget, staff of 30. 4 years agronomy/turf degree preferred, 2year or certificate acceptable. Internships at two clubs or other course experience required. 1-3 years exp. as asst. or foreman. Crew mgt. exp. and computer skills required. Salary \$25-\$30K, plus 90% club paid health insurance, vacation/sl, dues/expenses, golf privileges. S/R to Matt Strader, Supt., Penn National Golf Club, 3720 Clubhouse Drive, Fayetteville, PA 17222; Tel. - 717-352-7360 or Fax -717-352-3533.

Montclair Country Club (KSL Fairways), Montclair, VA - 18 hole private club, 35K rounds, \$350K budget. 2 year degree or equivalent 1-2 years experience. Chemical application and irrigation skills helpful. Negotiable salary, plus paid life, health and disability insurance, paid vacation and sick days, dues, clothing allowance, family golf and club privileges, 401k. S/R to Mike Salvio, Supt., Montclair Country Club, 16500 Edgewood Dr., Montclair, VA 22026.

Powelton Club, Newburgh, NY - 18 hole private club. Automatic irrigation, all bent/poa. Self-motivated individual with 2-year degree in turf mgt. or related field, or Short Course certificate. Minimum 3 years exp. at a reputable club. NYS pest. license required. Salary \$20-\$24K, comm. w/exp. and education, plus health, dues, golf privileges. S/R to Robert DeMarco, Supt., 440 Route 9W, Newburgh, NY 12550.

OTHER POSITIONS

Turfgrass Grounds Maintenance/ Management Agent, Eastern PA - Penn State Cooperative Extension is seeking an individual to plan, implement, conduct and evaluate Extension educational programs in the broad areas of turfgrass culture and management, working with commerical and residential lawn care firms, industrial, commercial, and residential grounds managers, municipal park and open space management, athletic field managers, golf course operators and sod producers. Identify problems, opportunities and educational needs of clientele in the multicounty area of Schuylkill, Northampton, Lehigh, Berks, Bucks, Chester, Delaware, Montgomery and Philadelphia counties. This position will be based in Delaware County.

Preference will be given to candidates who have one or more degrees in agronomy, turfgrass science, soil science, plant science or horticulture. A Master's Degree is preferred, but candidates with BS and evidence of successful programming, etc., will be considered. Candidates who have related work experience in turf production, turf or grounds maintenance, garden center operations or other related experience are encouraged to apply. Candidates should possess effective program development, teaching, communication, human relations and evaluation skills. Salary commensurate with education and experience. Competitive salary and liberal benefits package. Applications are available by writing or calling Human Resource Services, 814-863-3452, Box DETG3, 307 Agricultural Administration Building, The Pennsylvania State University, University Park, PA 16802.



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- Repair ball marks
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A message from your golf course superintendent and GCSAA

MEETING NOTES

JULY AT EDGEWOOD

PTGA visited Edgewood in the Pine for the July meeting. We would like to thank Michael Kubasek for a clean/green golf course, and Allen Katasky for a meal fit for a king. Bob Dickison from Upper Montclair C. C. gave a very informative talk about preparing for a major tournament. The subject brought several questions from the floor and Bob had all the answers. Thanks to Bob, we are now one step closer to our own first major event.

Speaking of events - the Pocono Boys hit the course with the course hitting some of them back! Special prizes went out to:

Mule Skinner - Jeff Peters (told the joke of the day);

Most 5's on a Score Card (9 out of 18 holes) - Rick Patterson;

Most Honest - Tony Stranzl;

Runner Up - Jack Patterson;

Closest to the Pin - Wannabe - Mike Dalberto



The MET Area Team Championship will be conducted October 6, 1997 at the Country Club of Darien in Darien, Connecticut. The PTA, as it has done in the past, would like to send a team of 8 players - 4 Gross and 4 Net to represent our Association. Anyone interested in participating in this most competitive golf Now down to serious business:

First Flight Ron Garrison

2nd Jonathan Suitch

1st

Second Flight 1st Steve Stranzl 2nd Ron Lee

Third Flight1stSankey Brumley2ndMichael Kubasek

Closest to the Pin Fran Berdine Jonathan Suitch

Longest Drive Gary Phillips, Jr.

The sun kept on shining that day and hasn't stopped since. Where's the Rain?? If anyone has a connection, please use it! See you next meeting.

Jack Bird, Golf Committee



event, please contact Jack Bird at 717-698-6384 so he can begin to assemble a team and work out all the details.

If you should have any questions or problems concerning the PTGA, please contact Melinda Wisnosky, who was recently hired as the Executive Secretary. She will answer your questions or direct you to a specific committee member to help you with a problem. Please be sure to let Melinda know when you have an address change so you can continue to receive your PTGA mailings. She can be reached at 717-675-3800 or Fax numbers 717-675-0564 or 717-388-2167.

COFFEE KNOWS WEATHER

Did you know a strong-brewed cup of coffee will forecast the weather for that day? Apparently so, because the atmospheric pressure affects the surface tension of the Java.

Consider:



- When the bubbles in the coffee collect in the center of the cup, the weather will be fair.
- When the bubbles form a ring around the edge of the cup, expect rain.
- If the bubbles are scattered over the surface, the weather bill be changeable.

The Weather Vane, published by Weather Metrics, Inc. Lenexa, KS GCM May 1997



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POCONO ROUNDUP

NEWS AND VIEWS FROM THE POCONO TURFGRASS ASSOCIATION

Please note the PTGA is now taking nominations for the October elections. If you would like to serve on the PTGA or nominate someone, please call Jeff Peters, Nominations Chairman, at 717-788-5041.

We are also soliciting PTGA Meeting Sites for 1998. What better way to show off your course than to host a PTGA meeting for all your fellow PTGA members. Please contact Golf Chairman, Jack Bird at 717-698-6384.

We would like to thank Walter & Juiia Whitney (JW Golf Driving Range) for their generous donation to the Scholarship Fund. We greatly appreciate their contribution.

CONGRATULATIONS! go out to **Ed Cimoch**, Superintendent at Scranton Municipal G. C. Word on the street is that Ed won the Club Championship this year at Glenmaura National Golf Club. Can the GCSAA Championship be far behind?

The Annual Joseph Valentine Memorial Golf Tournament will be held at the Huntsville Golf Club in Lehman, PA on October 7, 1997. Proceeds from this event will benefit the Turf Project at Penn State University. Contact John Chassard (610-967-4643) or Todd Struse (215-884-2590) for more information. Anyone interested in assisting with the preparation of the course on the day of the event, please contact Scott Schukraft, Superintendent at 717-675-3800.

We would like to welcome the following new members:

Ryan Rockovits, Class B, Whitetail Golf Club E. W. (Chip) Presendofer, Class AF, A T Sales

As mentioned in Ron's *President's Message*, Mike Vella, former superintendent at Clinton C.C., has accepted the construction/grow-in responsibilities at Rees Jones' latest golf course in Albany, New York. Congratulations and best wishes go out to Mike as he "pursues his dream."

And this from the delirious mind of Mr. James MacLaren: "How much oftener will Greens need to be spiked/aerified now that golfers won't be??



POCONO TURFGRASS ASSOCIATION 2430 MILWAUKEE ROAD CLARK SUMMIT, PA 18411

POSTAGE

NAME & ADDRESS

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