

JANUARY, 1966  
VOL. 19, NO. 7



# The Bull Sheet

*Official Bulletin*

*Midwest Association of Golf Course Superintendents*

**National  
Turf  
Conference**

**NO MEETING  
IN FEBRUARY**

**KANSAS CITY  
FEBRUARY 14-18  
SEE YOU THERE**

THE BULL SHEET, official publication of THE MIDWEST ASSOCIATION OF GOLF COURSE SUPERINTENDENTS.

DOUG JABAAY, Editor  
P. O. Box 305  
Naperville, Ill. 60540

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#### OFFICERS

President - Adolph Bertucci  
1st Vice-President - Dudley Smith  
2nd Vice-President - Walter Fuchs  
Secretary & Treasurer - Roy Nelson

#### DIRECTORS

Edward Braunsky                      Gerald Dearie, Jr.  
E. F. Johnson                          Douglas Jabaay  
Thomas Burrows                        Edwin Wollenberg

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### *The President's Message*

Historically, the newly elected President's first message is basically a thank you and a promise. The thank you meaning how grateful the new President is for being selected to lead the Midwest Association, and the promise that of trying to do a good job. It goes without saying that I feel the same way as those who have preceded me in this office, but I do feel that more important than that, I think you should have an idea as to my personal objectives for my term as President.

Everything we are exposed to these days is new — new equipment, chemicals, seeds, and methods; new concepts in management, labor effectiveness and construction, all new. I know each of us are appreciative and are receptive to these new innovations, but I feel that there's a few of the old things that perhaps we often overlook or forget. I'm talking about the things that have made us what we are as individuals and as an Association. The most important of these old things is Fellowship and Teamwork. For 1966, I'd like to propose a slogan for the Midwest Association of Golf Course Superintendents and it's quite simply "let's bring back the good old days." Let's keep pushing ahead with the new ideas, turf management materials and techniques. Let's keep on trying to improve and keep abreast of the times, but at the same time, let's bring back the spirit of help and mutual cooperation that the old timers had when they started the Association.

This year, let's all pull together to eliminate some of the problems that we have experienced and go on to make the Midwest — Better Than Ever!

Adolph Bertucci  
President

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**CLEARY'S TURF SPRAYS**

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On January 7, 1966 Donald Strand age 58, passed away. His wife Marjorie preceded him in death in 1961. He is survived by two sons, Donald and Clair Robert, a sister, Norma Bright, and five grandsons.

Don was Superintendent for some twenty-five years at Westmoreland Country Club, Wilmette, Ill. Previous to this he was at the Fort Wayne Country Club. He also was associated at one time with the Maddox Construction Company in the building of golf courses. In his early years he was employed by the Remington Arms skeet and trap shooting division.

Don was past president of the Midwest Golf Course Superintendents Association as well as director of our National Association. May we all bow our head to a man that has done so much for our profession.

The members of the Midwest Association wish to express our sympathy to Leo Cleary and the W. A. Cleary Corporation in the passing of Bill Cleary on December 4, 1965. We all know of him as a person whose high ideals in the golf supply industry have long furthered the cause of the Golf Course Superintendent. May his good work continue on with those who are left to carry on.

## DECEMBER MEETING

Brae Loch Country Club was quite a surprise! The Nielsen's have a right to be proud of the new addition to the club house. If the dinner and the service that was shown us is a standard of the hospitality found here, it looks like a good year is in store for the Brae Loch Clan in 1966. The hors-d'oeuvres were through the courtesy of Clavey Nursery and the H & E Sod Nursery.

This being our annual meeting, election of officers was the first thing on the agenda. Adolph Bertucci was elected President, Dudley Smith First Vice President and Walter Fuchs Second Vice President. Roy Nelson was re-elected as Secretary Treasurer. The new Directors for a two year term are Thomas Burrows, Gerald Dearie Jr. and Ed Wollenberg. Retained for one year is Edward Braunsky, Doug Jabaay and Al Johnson, our past President.

A change in the by-laws was affected whereby the proxy vote was discontinued. The only vote that is valid for election is in person, at the annual meeting. The board was directed to study the question, arising from the floor, on the use of absentee ballot. The report to be brought up at a future meeting.

Thanks to Brae Loch Country Club for the hospitality extended to the M.G.S.A. and for the opportunity to meet here again. We hope to see them at a summer meeting soon so that we can have the pleasure of playing their fine golf course.

Next Month

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Dean O. G. Bentley of the University of Illinois College of Agriculture receives a check for \$1,800 to help conduct research at the U. of I. James Burdett, Lombard, makes the presentation as Ben Warren of Palos Park looks on. Burdett is vice-president of the Illinois Turfgrass Foundation; Warren is a director. The annual award, made for the sixth time, was presented at the recent Illinois Turfgrass Conference held on campus.

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**REPORT  
ANNUAL MEETING**

The pictures on the right were taken at the election of officers at our December meeting.

Top two pictures show some of the discussion groups waiting for the ballots to be counted.

Picture No. 3 shows our election committee hard at work.

No. 4 is the gavel ritual of the outgoing and incoming Presidents.

The following are the committees that were formed for 1966.

**COMMITTEES**

**Education and Research**

DUDLEY SMITH  
THOMAS BURROWS

**Arrangements**

WALTER FUCHS  
EDWIN WOLLENBERG

**Entertainment**

GERALD DEARIE, JR.  
EDWIN WOLLENBERG

**Golf**

EDWARD BRAUNSKY  
THOMAS BURROWS

**Membership**

E. F. JOHNSON (North)  
GERALD DEARIE (West)  
DUDLEY SMITH (South)

**Placement**

ROY NELSON

**Publicity**

DOUGLAS JABAAY

**Benevolence**

DOUGLAS JABAAY

**Attendance**

TED WOHRLE

**By-Laws**

PETER BILD  
WM. STUPPLE  
FRANK DINELLI

# PHOSPHORUS AND POTASSIUM

W. D. Haven

International Minerals & Chemical Corp.

If nitrogen is king of the plant food elements, then phosphorous is the power behind the throne. Long after the role of nitrogen in plant nutrition was well established, the function of phosphorous was still a mystery. Since World War II it has been found that phosphorous compounds supply the energy necessary to run the plant mechanism.

## Root Promoting Element ??

Several years ago a researcher at one of the experiment stations reported an increase in potato yields following heavy applications of phosphorous fertilizer. From that time on, the major role given to phosphorous in plant physiology has been root development. This is true if we are talking about root crops. In other crops, such as turf grass, phosphorous has no special effect on roots other than normal carbohydrate storage.

Recent research reported in "Crops & Soils" showed that in some instances phosphorous fertilizers increased top growth more than root growth and in most cases the top growth and root growth were nearly equal.

## Where The Action Is!

Although phosphorous occurs in organic compounds in a plant it also occurs as a host of inorganic compounds which largely function to supply energy for areas of vigorous development. Wherever there is major activity, such as cell division, seedling development, tip growth, or carbohydrate storage, phosphorous compounds are at the site supplying the power to drive the action.

Phosphorous is involved in the initial reaction of photosynthesis. Without a balanced supply of phosphorous on hand in the sap stream the entire plant organism would soon sputter to a halt.

## Deficiency Symptoms

Although extreme phosphorous deficiency may result in some leaf yellowing, the more common appearance is a dull and dark bluish-green color, which may be coupled with tints of bronze or purple. The purple coloration is the most striking and most frequently mentioned, however, it is not a very reliable symptom because conditions other than phosphorous deficiency in turf can cause purpling of the blades. Tissue tests and soil analysis are a more reliable indication of the phosphorous situation.

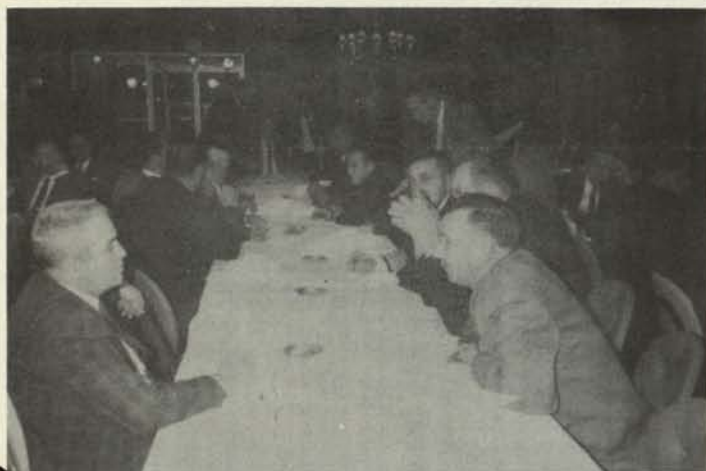
## Phosphate Fertilizers

Phosphate fertilizers are not all alike — they differ in particle size and water solubility.

For example, ground rock phosphate is soluble and of low fertilizing value. When treated with sulfuric acid, it becomes ordinary superphosphate with 20%  $P_2O_5$ . When treated with phosphoric acid it becomes triple superphosphate having 46 to 54%  $P_2O_5$ . Most of the phosphorous in the superphosphates occurs as water-soluble monocalcium phosphate. Ammonia added to superphosphate forms various ammoniated phosphates — some soluble and some insoluble.

The effectiveness of the insoluble phosphates is increased by finer particle size. In general, the greater the water solubility of a phosphorous fertilizer the more effective it is. The phosphorous diffuses over a large area in the soil thereby increasing the probability of root contact.

(Continued next page)



For tough turf that must repair its divots, phosphorous is a prime necessity — and a soil test periodically to check its level is a wise management practice.

#### Potassium — The Health Nutrient

One of the principal industries of the Jamestown colonists in 1608 was the making of Potash. Pot ash was essential for the manufacture of soap, glass, and gunpowder in that day. The early pioneers had no idea that potash was essential for growing plant life, though some probably noticed how wood ashes from burned trees seemed to improve their soils.

Approximately 400 to 500 tons of wood was required to produce one ton of potash. In 1840, the German chemist, Liebig, recognized the importance of potash for growing plants. The supplies of wood ashes declined, and the new knowledge about potash for plant growth began to create interest in potash fertilizers.

The role of potash in the plant is associated with the manufacture of carbohydrates, and is linked with nitrogen in controlling growth. Obvious responses to potash fertilizers are seldom obtained, though there is evidence that turf receiving potash remains greener during winter months and in periods of drought.

It has often been called the "Health Nutrient" because plants that are generously supplied with it seem to be more disease resistant. This probably results from its tendency to check the soft rapid, growth produced by nitrogen.

Absorption of potassium from soils by plants is limited by conditions of poor aeration. This inhibiting effect is more pronounced with potassium than with any of the other nutrient elements.

#### Winterizes

Potassium is the anti-freeze of the turf. It not only promotes large, deep, evenly distributed roots, but also causes large, more evenly spaced xylem vessels — the pipeline of the plant. Potassium hungry plants have smaller pipelines that bunch together in the center of the root. This interferes with the flow of raw materials through the plant making it more difficult to supply the extremities of the plant during winter stress. Poor pipeline structure also hinders the plant in warding off disease.

#### Deficiency Symptoms

In young plants the first symptom of potassium deficiency is a slowing down of growth followed by a yellowing and yellow streaking in the leaves. As the plants increase in size, the need for potassium increases; and if the supply becomes inadequate, foliage symptoms appear similar to those in younger plants. In severe cases the edges of the leaves will become dry and scorched.

Deficiency symptoms usually appear first on the bottom leaves and progresses gradually up the plant toward the youngest leaves.

#### Fertilizer Materials

There are many kinds of potash fertilizers. Among the most common are muriate of potash (KCl), sulphate of potash (K<sub>2</sub>SO<sub>4</sub>), and sulphate of potash-magnesia (K<sub>2</sub>SO<sub>4</sub>-MgSO<sub>4</sub>).

Muriate of potash, the principle potash material used in fertilizer runs 96 to 99% potassium chloride and is equivalent to 60 to 62.5% potash.

Sulphate of potash is produced by treating muriate of potash with acids or neutral salts. It usually runs from 92.5 to 96% potassium sulphate and is equivalent to 50 to 53% potash.

Sulphate of potash-magnesia is a mineral contain-

ing a minimum of 22% K<sub>2</sub>O (potash), 18% MgO (Magnesium), and 22.7% Sulfur.

#### Summary

One nutrient alone cannot do the job. Certain interrelationships of potassium and other elements such as nitrogen, phosphorous, calcium, magnesium, sodium, etc., affect turf production. Not only the supply but the relationship of supply called balance is important.

As the technology of the elements and their relationship to prime turf production advances the astute turf manager will find it more and more to his advantage to know the element levels in his soil, the sources of nutrient supply, and the most ideal balances to maintain of all the elements.

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## WINTER PERSPECTIVE

C. O. Borgmeier

The inflation pressure continues unabated with no prospect of a halt or stabilizing. Sure the Administration can make a few grandstand plays like cracking down on the metal industries, but what about the price of pork which has advanced nearly 100% in one year? That effects the consumers with fixed incomes much more intimately than the price of aluminum metal. What feeds inflation? Excess demand or purchasing power on the part of individuals, industry and the government fueled by constantly increased supply of money and credit. So money is losing its value or purchasing power, but everybody, especially the politicians, enjoy that feeling of well being, they never had it so good. Will it continue indefinitely? Past experience says no, but with no solution in sight of the war involvement, the prospects are: more inflation and a shortage of labor. The headache will come when the spree is over.

Labor will continue to be the superintendent's biggest problem. There is now a definite shortage of skilled labor. Mechanics are in much demand so in addition to your own problem sympathize with your suppliers on whom you depend for service. They have to compete with the automobile industry for mechanics and with the plumbing, electrical, heating and appliance industries who charge you from \$7.00 to \$10.00 per hour for a serviceman. So plan to expand your fairway gangs to nine and equip all hands with labor saving tools wherever possible. You are cast in a role where your labor relations problem puts you between the club owners or officials and your workmen. From a humane point of view it behooves the superintendent to champion the cause of his workers well being to ease his problem. Understanding owners and officials will appreciate your position but it is a real selling problem to attain fair wages and fringe benefits for golf course labor.

Golf play has flourished the past year. Private clubs will benefit from the excise tax elimination on dues and assessments on January 1, 1966. This will amount to an average of \$25,000 per club. Many clubs plan to increase dues to the extent of the excise tax being eliminated. It would seem that grounds budgets should benefit greatly to cover increased wages.

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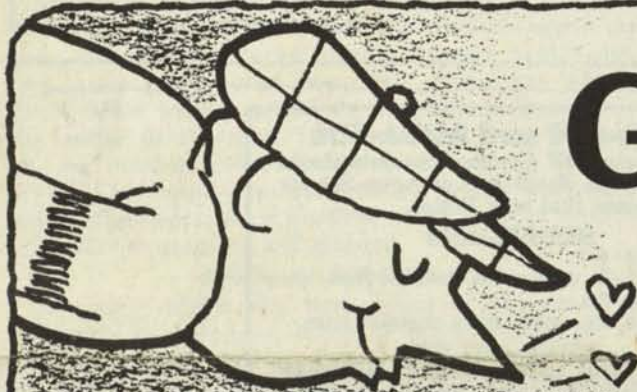
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