THE GREENKEEPING SUPERINTENDENTS ASSOCI-ATION will hold their 1948 Annual Golf Tournament, Oct. 4th and 5th at The Medinah Country Club where the 1949 National Open will be held.

Taking part in this tournament will be more than just playing golf. It will also give us an opportunity to walk over and see a course that is being groomed for the USGA event. We may see some things which we can take back home with us and improve our own golf courses.

We are planning to charter as many buses as necessary for a tour to a number of golf courses in the Chicago district. More information concerning this GSA tournament will be publicized monthly in our association bulletin throughout the summer season. In the meantime start swinging.

Ray Gerber, Tournament Chairman.

The 1st ANNUAL GOLF TOURNAMENT arranged jointly between the Midwest Association of Golf Course Superintendents and the Illinois Section, Professional Golfers Association of America. is scheduled for May 10th at Tam O'Shanter Country Club. The ultimate success of this event depends upon the support of our membership. The goal of both organizations, is to make this one of the outstanding local golf events in the Chicago district. The only way this can be accomplished, is by the determined effort of every member to participate. Let us all try to make this one of the big days in our 1948 Association Calendar.

Fra ternally yours,

Don Strand, President

MIDWEST ASSOCIATION PICNIC will be held at Sycamore Golf Club, June 21st. Plan to attend this family get-to-gether. There will be games for everyone.

THE CHICAGO DISTRICT GOLF ASSOCIATION will conduct a Green Chairman and Green-keeping Superintendent's meeting for all CDGA member: clubs on Monday, May 17th, in the Chicago Room on the mezzanine of the La Salle Hotel, at 6:00 P.M. A discussion on pertinent course maintenance problems by nationally known speakers will highlight the evening's session.

20TH ANNUAL NATIONAL TURF CONFERENCE AND SHOW sponsored by the Greenkeeping Superintendents Association will be held in Los Angeles, California on February 7 - 11, 1949.

* * * * * * * * * * * * * * * * Nature has made two kinds of excellent minds; the one to produce beautiful thoughts and beautiful actions, the other to admire them.

- - Joseph Joubert

Our liming of the entire golf course was completed during the past winter months. We were unable to find out when our courses had last been limed, so sample PH readings were taken - throughout the grounds, and these readings indicated that from 2 to 4 tons of limestone were needed per acre.

We contracted with a local trucker who possessed three trucks with tail gate spreaders to haul and distribute the material at the rate of \$2.25 per ton.

The application was completed January 27 and was accomplished over about one inch of snow. The amount used - was 750 tons over 36 holes and the results of uniform distribution were satisfactory. Marking or tracking of fairways was negligible as some 30 inches of frost existed. Average pay load of trucks was approximately 7 tons. The limestone was hauled - from McCook, about ten miles from the golf course.

- - John R. Coghill, Silver Lake C.C.

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- - Ivan Panin

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SOMETHING ABOUT FERTILIZERS

Synthetic Sodium Nitrate. Briefly, the most common method of manufacture of synthetic sodium nitrate is accomplished as follows:- Gaseous nitrogen is combined with hydrogen, obtained from coal gas to form ammonia. The ammonia thus formed is oxidized by suitable catalysts to nitrogen oxides. The nitrogen oxides are then absorbed in a solution of sodium - carbonate that has been obtained from so dium chloride by the well known Solvay - process. The resulting solution of sodium nitrate is then partially evaporated and the solid material allowed to crystallize.

Physical Characteristics of Sodium Nitrate. Two brands of Chilean sodium nitrate are now found on the market—original OLD STYLE and CHAMPION. The Old Style brand is the sodium nitrate produced by the Shanks process. It may vary in color from pink through yellow to a gray or violet. The 'Old Style or Standard brand of sodium nitrate is crystaline and somewhat deliquescent but due to an improved mechanical condition and bagging, it has less tendency to become lumpy than was formerly the case.

THE NEW PROCESS or Champion brand of Chilean sodium nitrate is produced by the Guggenheim method and appears on the market in a granulated form made up of shot-like pellets. It is very white in color. It has a better mechanical condition than the old-process product.

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THE SYNTHETIC ARCADIAN (AMERICAN) sodium nitrate is produced in the form of cubical crystals with rounded edges, the size of No.6 bird shot, and is guaranteed to carry 16 percent of nitrogen. It is low in moisture content and is in a good mechanical condition for distribution, but has a tendency to "blow" when broadcast during windy weather.

Sodium nitrate is commonly referred to by southern greenkeepers as "soda" It is readily soluble in water and because of this it may diffuse rapidly in the soil. It is, therefore, immediately available for plant absorbtion following application and solution, but because of this it is also subject to loss by leaching.

As sodium compounds have the power to deflocculate soil colloids, the continuous application of sodium nitrate in large quantities to some soils, particularly to those that are high in colloidal matter, will result in the production of a poor physical condition.

Sodium nitrate is physiologically basic and it therefore has the power to reduce to some extent, the acidity of the soil. Theoretically, 100 pounds of sodium nitrate has the neutralizing value equivalent to about 60 pounds of ground limestone. It is well to keep in mind that the influence of sodium potassium and calcium nitrates on soil reaction is just the opposite to that produced by the use of ammonium sulphate to the soil results in increased acidity.

Influence of Sodium Nitrate On The Liberation of Potash. There is an idea current among some fertilizer men, that has persisted for a quarter of a century, to the effect that the sodium which is left in the soil after the nitrate ion of sodium nitrate has been absorbed by plants will give rise to a substitution of bases in the soil which will result in making unavailable potash available for plant use. This influence of sodium nitrate is of doubtful value, for the positions of the potassium and sodium in the electromotive series would lead one believe that the quantity so set free would be small. However, sodium may supplement potassium as a plant nutrient. The application of sodium nitrate to the

soil may also aid in conserving calcium and magnesium in the soil.

Visable Influence of Sodium Nitrate On Plant Growth. Nitrogen is the first limiting element of plant growth in many of the soils of the eastern and southern sections of the United States. For this reason the application of any readily available nitrogenous fertilizer often materially increases crop growth. This effect following an application of sodium nitrate is often noted by the layman, with the result that in the past sodium nitrate has been looked upon by many as a stimulant. This is an erroneous conception and should be discredited.

How Sodium Nitrate Should Be Applied. Because sodium nitrate is readily and entirely soluble in water, and because the nitrate ion is not readily absorbed by the soil colloids, it should be applied for early utilization by the plant following application. It will be found best to apply sodium nitrate, when large amounts are to be used, in two or more applications. Such a practice will minimize the loss of nitrogen by leaching, and at the same time will avoid injuring plant roots by applying excessive quantities of soluble salt at one time. Topdressings of sodium nitrate often appear to be more effective during cool during warm seasons.

(to be continued) (Commercial Fertilizer)

We have gathered bouquets from other men's flowers; nothing but the thread that binds them is ours. * * * * * * * * * * * * * *

TEN HINTS FOR GOOD LAWNS

- 1. Make the lawn area smooth and well graded with 8 inches of fertile top soil before seeding.
- 2. One week before planting rake into the seedbed ammonium sulphate or ---other nitrogen fertilizer at the rate of 4 lbs. per 1,000 sq.ft. to establish a strong stand of grass quickly. At the same time apply 15 lbs. of superphosphate (0-25-0) or use 15 lbs. of 4-16-0 which contains the nitrogen and phosphate together. Repeat the application of nitrogen fertilizer to the young grass the latter part of May.
- 3. Sow a high-quality seed mixture evenly and at the recommended rate of application.
- 4. Seed the prepared area Sept. 1, or April 1 as a second choice.
- 5. Adjust the lawn mower to cut the grass 11 inches high.
- 6. Follow a regular fertilizing schedule every year: Apply 4 lbs. of ammonium sulphate, nitrate of soda or other nitrogen fertilizer, April 1st and June 1st; 6 to 8 lbs. of a 10-6-4 or 10 to 20 lbs. of 4-12-4, Sept. 1st; and 1 cubic yard top-dressing of composted soil in November.
- 7. Control dandelion, plantain and other lawn weeds by spraying with one of the 2,4-D compounds.
- 8. The lawn area should receive at least several hours of sunlight each day. Lawn grass will starve because of the shade and roots of too many trees.
- 9. In the fall, remove the lawn leaves and other material that may be thick enough to smother the grass during the winter.
- 10. Keep off the lawn as much as possible during the winter and early spring.

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