

Fall Fertilizing Stores Grass Food For Spring Start

By LEONARD LIPMAN

Synthetic Nitrogen Products Corp.

GOLF course maintenance methods, like modern business methods, are dynamic. Trial and error methods, quasi-scientific ideas, and agronomical findings of leading scientists are all brought to the attention of the befuddled greenkeeper—but not always in the language which he uses. The exponents of each attempt to sell the greenkeeper on their own idea and divert him from the other plans. In an effort to please everyone except himself the greenkeeper tries this—then that—then something else—and then can't seem to get entire satisfaction.

He then starts his own experimental plots. These he fertilizes with organics, with chemicals and with mixtures; he "seeds" with stolons and with seeds; he treats with mercury, arsenate of lead, worm remedies and other things too numerous to mention. He finds, too often, just nothing. All the time this unfortunate greenkeeper has on his back a green-committee endowed with optimism and activity but cursed with "the little knowledge that is a dangerous thing." It takes time carefully to follow up this work and it takes a research specialist to deduce anything from the results; and even this specialist sometimes finds results simply are not there.

Many thousands of words have been used in discussing golf course fertilizers, many hours of bitter arguments have ended in near murders—and still we are not sure what to feed our sickly turf.

But let us try to talk common sense—let us weigh the question in the scales of experience and see what balances. We know that nitrogen is the most important element in turf growth. We know that phosphorus and potash are also essential. On the latter many authorities disagree but we must make sure. When potash is taken from the soil it is replaced by the hydrogen ion. The hydrogen ion is the reason for soil acidity. Conclusion, use potash and do not permit fairway soils to become over-acid.

Formerly we felt that because growth of grasses started in the spring, fertilizer should be applied in the spring. It was heresy to fertilize in the fall; in fact no one ever dreamt of fertilizing at that time of the year. What was the use? The grass was slowly approaching dormancy, cold weather was approaching,—why waste fertilizer? Some one must have accidentally spilled some fertilizer on his turf one fall and to his great surprise he discovered the next spring that this piece of grass "greened up" several weeks earlier and kept on growing later in the summer, while the rest of his turf soon became brown and burned out. Then the news spread and very careful research work was begun.

Storing Grass Food.

It was found that fall fertilization had the definite property of enabling turf to store up food. Never before had this fact been considered. Thus storing up food was possible. It was indeed something which we would have expected had we thought anything at all about it—all perennial plants store up food against the needs of the coming spring. Now it seems natural enough. After a long summer's drought and hot weather the grass is hungry. Food is needed or else the following year the turf will be seriously retarded in its growth.

Retain Spring Fertilizing.

Spring fertilization is not to be discarded—not for anything, but it should be supplemented by fall feeding of the turf.

Turf has perhaps 6 or 7 weeks of growing weather in the fall before heavy frosts begin and dormancy appears. Any fertilizer used must have certain properties in order to produce best results. The more quickly available a fertilizer becomes after application the more time turf will have in which to respond to the feeding and store up food against the adverse conditions of winter and spring.



The TORO "SOD-KUT" for Perfect Sod

A hand power tool that cuts sod with smooth, even edges and uniform thickness . . . 13½" wide, any length. Easy to operate . . . two men can cut 15,000 square feet of sod a day. Does not damage lawn. Write for full information.

TORO MANUFACTURING CO., 3042-3168 Snelling Ave., Minneapolis, Minn.

BUY GREENS that withstand heat!



Lay them down
like a carpet!

Hundreds of landscape architects, golf and country clubs, greenkeepers, parks, athletic fields, estates, homes, etc., use Illinois Grass Co.'s True Washington Strain Creeping Bent in solid turf form. Our greens withstood the heat waves of the past two years like nothing else. Furnished in rolls ready to lay down like a carpet. Extremely hardy and uniform in texture; is mowed with a putting green mower and is hand-weeded at our nurseries. Guaranteed to grow vigorously into rich, velvety greens if properly cared for. Our scientific nursery methods of propagation and growth are unexcelled. Also sold in stolon form, packed 250 sq. ft. to the bag, same high quality as the turf. We also grow Blue Grass sod.

Write today for prices, samples and facts about our unusual service.

J. A. CARTER, Sales Agent—75 E. Wacker Drive, Chicago, or the nurseries at

ILLINOIS GRASS CO.

18455 Reigel Road, Dept. 302, Homewood, Ill.

SAVE YOUR GREENS AND BANK ACCOUNT WITH FUNGO AND VEG-E-TONIC



FUNGO FOR BROWN PATCH AND SOIL VERMIN

The 2 in 1 compound that controls Fungous Diseases, Earthworms, Sod Webworms, Grubs, Beetles, etc. Applied either wet or dry. Will not burn or impair soil fertility. Very economical.

VEG-E-TONIC

Golfdom's "no filler" fertilizer. Dissolves in water, producing a "cool food" which does not burn or streak your greens. No "watering in." 21% Nitrogen, 13% Phosphoric Acid, 10% Potash. Prompt and lasting results guaranteed.



Small samples of FUNGO and VEG-E-TONIC mailed upon request. Write for our Monthly Schedule System of Green treatment. All free.

McCLAIN BROS. CO., 127 2nd St., Canton, Ohio

We must use water soluble materials because we know they are the most readily available for turf use. I do not condemn organic materials, but do not count on them primarily for fall results—they serve a definite purpose if your fairway soil is too light or too heavy. They can back up water soluble materials by absorbing part of the plant food and releasing it more slowly over a longer period of time. In fall feeding to strengthen the turf, however, depend on the immediate action of water soluble materials.

We know that fertilizers are only as valuable as their food content. Food content is expressed in percentages of the total weight of the material, for example, 5-10-5 is a guarantee that in each one hundred pounds of the product are 5 pounds of nitrogen, 10 pounds of phosphoric acid (P_2O_5) and 5 pounds of potash (K_2O). Therefore the product having the largest percentage of these ingredients gives more value. It may cost more per ton, but because it covers many more acres of fairway it, in the end, is more economical.

Finally then we achieve the balance. We know that turf responds to fall fertilization, that it should have a water soluble,

Demand GENUINE PYRATONE SHEATH

QUICKER SALES—BIG REPEAT BUSINESS

For smarter looking and longer lasting clubs, have them equipped with Pyratone Sheath. Pyratone Sheath is the only finish Guaranteed for the life of the club. Leading Club Manufacturers Can Supply You.

PYRATONE PRODUCTS CORPORATION
1457-67 W. Austin Ave. Chicago, Ill.

**ALWAYS
SHARP**



**DIAMOND
Steel Center
Tractor Spud**

Write!
**DIAMOND CALK
HORSESHOE CO.**
4702 Grand Ave., Duluth, Minn.

quickly available fertilizer so that it can respond during a short growing season. We also found that fertilizers containing higher food percentages are more readily available and usually more economical.

The greenkeeper of today does not have to turn his course into an experiment station. Neither does he have to ponder over methods of procedure for best fairway fertilization results. He knows.

BANZAI FOR TOM!

Miamoto, Jap Pro, Welcomed
Home from Tour

TOMAKICHI MIAMOTO, star Japanese professional who was launched on a globe-trotting tour by Bob Harlow, former impresario of the PGA tournaments, has returned home. Although the genial young Jap's appearance in last winter's tournaments and his presentation in the U. S., British and Canadian opens and summer exhibitions was the direct result of Harlow's negotiations with Japanese government officials, it seems as though the cable companies should have stood some of the financial rap as sport news sent back to Tom's homestead ran for lengthy wordage.

WAIT

for Sensational Innovation
in Golf Bags

GOLF PAX

Wait for the Tufhorse salesman to show you Golf Pax—the greatest new thing in golf equipment. Des Moines Glove & Mfg. Co., Des Moines, Iowa.

A PRIMER of GOLF INSTRUCTION

By **HAROLD SAMPSON**

For the first time a book devoted to teaching how to teach golf. It presents the methods of the most successful golf instructors.

Pro endorsement gives this book a high rating.

An eastern pro says:

Smart pros will read it and—as I am doing—recommend its use to their pupils.

From a southern pro:

It ably defines and explains the fundamentals of resultful instruction.

And a New England pro:

Every young instructor should read it. It will help both pro and amateur.

A western pro's comment:

It will mean much to pro and amateur in the advancement of golf.

PRICE \$2.50

Order direct from the author,

HAROLD SAMPSON

Professional

BURLINGAME C. C., BURLINGAME, CALIF.

CREEPING BENT

STOLONS OR SOD

**METROPOLITAN and
WASHINGTON**

We can supply you with either, *But*—we recommend Metropolitan, because of its better resistance to small brown patch. Just ask any greenskeeper who had experience with either of them last summer.

*Metropolitan Outsold Washington
Ten to One Last Fall. That is
Something to Remember.*

We also have available this fall a small quantity of Velvet Bent Stolons and Sod.

PRICES ARE THE LOWEST THEY HAVE EVER BEEN.

THE FLOREX GARDENS
NORTH WALES, PA.