
TIMELY TURF TOPICS

from the USGA Green Section

GREEN SECTION HISTORY — A REVIEW

By FRED V. GRAU

DIRECTOR, USGA GREEN SECTION

THE history of the beginnings of the Green Section and its real significance in the development of Better Turf are obscure to many of the USGA member clubs today. In order to appreciate the efforts of the United States Golf Association toward the improvement of golf courses to the enjoyment of the game of golf, one should understand some of the background of its turf branch, the Green Section.

April, 1923—Twenty-Five Years Ago

This historical sketch covers the April 21, 1923, number of the BULLETIN of the Green Section of the United States Golf Association, which was published by the Green Committee of the USGA at 456 Louisiana Ave., Washington, D. C. The masthead states, "A monthly periodical to promote the betterment of golf courses."

Members of the Executive Committee who were on the Green Committee were: C. V. Piper, E. J. Marshall, Walter S. Harban, Wynant D. Vanderpool, and Alan D. Wilson. The permanent members were: Hugh I. Wilson, Merion Cricket Club, Haverford, Pa.; F. H. Hillman, W. R. Walton, and Lyman Carrier, Washington, D. C.

The contents of this issue are of great interest. To acquaint our readers with this material, short abstracts and some quotations are presented.

Turf Experiments at the Florida Experiment Station—C. V. Piper

Attention is called to the turf plots at the Florida Experiment Station which include tropical and subtropical species new to the United States. The text is illustrated with photographs showing the texture of each

type of turf in relation to a golf ball. Grasses described include:

Centipede grass, which is described as "a splendid fairway grass . . . and not a bad putting green grass if kept well rolled;"

Bahia grass, the common grass of Western Cuba and one which forms the fairways at the Havana Country Club;

Blue couch-grass, an Australian grass, which makes a fine dense turf fit for putting greens;

Bermuda grass—a discussion of four types (Giant, St. Lucie, ordinary, and Atlanta);

St. Augustine grass, not a bad one for fairways;

Giant carpet grass, a good fairway grass in evidence at the New Orleans Country Club;

Korean grass (*Zoysia japonica*—then called *Osterdamia japonica*), a splendid grass for tees and fairways, occurring at the Palm Beach Country Club and the Miami Country Club.

The experiments, conducted in cooperation with the Green Section, were in charge of Prof. J. M. Scott and Mr. W. E. Stokes.

Vegetative Planting —Lyman Carrier

It was thought that this subject had been described previously in such detail that everyone understood it. Circulars on the subject frequently brought by return mail the question, "Where can I buy seed of this grass and how much is it a pound?" [It is still happening—Ed.]

Vegetative planting is as old as written history. Sugar cane has been planted in this manner for centuries. The article described

in detail the method for planting bent. Bent was not known to be successful south of Richmond, Va.

In planting a 6,000 square-foot green, 10 cubic yards of topdressing made up of 1/3 each loam, sand, and manure were required to cover the planted grass. If sand and manure were not available, ordinary topsoil was to be screened and used.

One square foot of stolons planted 10 square feet of green. A crew of 14 could plant from 1,500 to 2,000 square feet an hour. With good care the green could be used for play in six weeks. The article was well illustrated.

New Member Clubs of the Green Section

Edge Hill Golf Club, Edge Hill, Pa.
 Hamilton Country Club, Olean, N. Y.
 Myopia Hunt Club, South Hamilton, Mass.
 Lookout Point Country Club, Welland, Ontario
 Plymouth Country Club, Norristown, Pa.
 Richmond County Country Club, Staten Island, N. Y.
 Hempstead Country Club, Hempstead, N. Y.
 Mankato Golf Club, Mankato, Minn.

“The Green Section does not guarantee or certify the goods of any commercial dealers in seeds, fertilizers, machinery, or other golf course supplies. Beware of the dealer who states or implies that his goods have the endorsement of the Green Section.”

Vegetative Planting of Bent Grasses: An Historical Sketch—R. A. Oakley

The author records the history of planting bent grasses vegetatively. Dr. C. V. Piper and his assistants, Prof. Lyman Carrier and Dr. R. A. Oakley, had observed the circular patches of uniform grass on all putting greens sown with seed of German mixed bent. This led to a start of the study in the summer of 1916 to solve the mystery. Plugs of grass were sent from the Columbia Country Club, the Merion Cricket Club, the Washington Golf and Country Club, the Ekwanok Club, and from the grounds of the Department of

Agriculture. A “veritable botanical circus resulted.” Two groups were classified—creeping bent (then called carpet bent), and velvet bent. Mr. F. H. Hillman, of the Seed Laboratory of the Department of Agriculture, had just discovered how to identify seeds of each of the various species of bent and redtop.

German bent seed in 1923, calculated free of redtop, chaff and weed seeds, contained only a trace of true creeping bent, 15% velvet bent and 85% Rhode Island (Colonial) bent. Only the creeping bent and the velvet bent produced runners that could be used to propagate the grass.

In September, 1917, plots 8 x 8 in the grass garden at Arlington were planted vegetatively to creeping bent and velvet bent. The runners [the word stolons was not used in this article—Ed.] were covered with one-half inch of good compost, largely topsoil, rolled and watered. Whole runners were used. In October, 1917, nursery rows were planted 8 rods long and spaced 6 feet apart. Between October 2 and 12, 1918, the first five greens to be planted with runners of creeping bent were established at the East Potomac Park Public Golf Course. This was a notable event.

The first bent grass nursery to be established on a golf course was planted in the fall of 1918 by Dr. Walter S. Harban at the Columbia Country Club. In 1922 bent runners from a commercial nursery were available for the first time. As a result, 125 greens were planted that fall. The No. 9 green at Columbia was cited as a good example of what could be done.

The author quoted an article written by Piper and Oakley in December, 1918, to the effect that surface runners and brown-patch would make trouble. By 1923 the trouble from surface runners had not materialized; proper topdressing had obviated it completely. Brownpatch had been serious but was reasonably well-controlled with Bordeaux mixture.

The greens planted at the East Potomac Park Course in the fall of 1918 were victims of a combination of unfortunate conditions which resulted in their undoing. Brownpatch was one factor. The author felt that it was needless to make predictions for the future of vegetative planting be-



Harris & Ewing

James D. Standish, Jr. (left), USGA Vice-President and Chairman of the Green Section Committee, and Dr. Fred V. Grau, Director of the Green Section.

cause the future was so near at hand that it would very soon speak for itself.

Vegetative Planting of Putting Greens—Walter S. Harban

This was a well-written article describing in detail the methods used in planting the No. 9 green (and others) at the Columbia Country Club. Most of the steps outlined are those in use today for vegetative planting.

Some New Bulletins Valuable to the Greenkeeper

THE USE OF CONCRETE ON THE FARM.

Farmers' Bulletin 461. U. S. Department of Agriculture, Washington, D. C.

FOOD OF SOME WELL-KNOWN BIRDS OF FOREST, FARM, AND GARDEN. Farmers' Bulletin 506. U. S. Department of Agriculture, Washington, D. C.

THE DRAINAGE OF IRRIGATED FARMS. Farmers' Bulletin 805. U. S. Department of Agriculture, Washington, D. C.

AMERICAN MOLES. Farmers' Bulletin 1247. U. S. Department of Agriculture, Washington, D. C.

CHOOSING A TRACTOR. Farmers' Bulletin 1300. U. S. Department of Agriculture, Washington, D. C.

PREPARATION OF PEAT COMPOSTS. Department Circular 252. U. S. Department of Agriculture, Washington, D. C.

SUBSTITUTION OF STABLE MANURE BY FERTILIZERS, GREEN MANURES, AND PEAT. Bulletin 188. Agricultural Experiment Station, Kingston, R. I.

THE JAPANESE BEETLE. Circular 46. State Department of Agriculture, Trenton, N. J.

GRASSHOPPERS, CUTWORMS, AND ARMY WORMS, AND THEIR CONTROL BY POISONED BRAN. Extension Circular 38. South Dakota State College, Brookings, S. D.

A Wonderful Turf Walk

An illustration shows a palm-lined walk in front of a home. The walk was built of coquina rock, the shell limestone of South Florida, and planted with Mascarene grass (*Osterdamia tenuifolia*). [This grass is now classified as *Zoysia tenuifolia*—Ed.] The editors stated that "It is believed that tees built on this plan would be ideal. The grass never grows over half an inch high."

Some U. S. Golf Association Decisions on the Rules of Golf

This consisted of Questions and Answers settling disputes over rules of the game.

Questions and Answers

In the April, 1923, number of the BULLETIN, questions were asked on these topics: Preparing a bent turf bed to be planted from seed; vegetative planting of bent greens; how to distinguish between creeping bent and velvet bent; relative value of the two bents; preparing for a bent nursery; *Poa annua* in putting greens; and renovating bent greens.

Meditations of a Peripatetic Golfer

"In the spring one itches to worry the soil and plant the seed. So far as grass seed is concerned, see if you can't restrain the itch and plant the seed at the best time—that is, in late summer.

"Corrosive sublimate is a perfectly reliable worm killer. It DOES NOT injure the soil unless used excessively and is much cheaper than any commercially advertised worm killer.

"'Clipped grass, if allowed to rot on the green, will cause a toxic condition.' The fellow who wrote this gives an example of pure 'rot' or, if you prefer, 'bunk.'

"Don't hesitate to mow old putting greens in spring as soon as necessary. It is folly to let the grass grow two inches high before mowing.

New Bentgrass Nursery at Beltsville Turf Gardens



USGA Green Section Photo

More than one hundred selected strains of bentgrass from all over the country are collected here for studies of adaptability to fairway use. The objective is ultimately to produce seed from the superior strains which, when blended and produced commercially, will develop superior fairway turf. Lawns and cemeteries also will benefit from these studies.

"The ideal tee is a large area of turf on the ground level but well drained. On such the turf is much more easily maintained; besides, if the area is large enough the plates can be moved every day. A raised tee is never defensible except to secure visibility.

"Buy your supply of bent seed now. You may not be able to get it later in time to sow between August 15 and September 15.

"Now is a good time to observe grass sown last fall, to see how much of a start it already has over that sown this spring.

"The idea that a bunker must be a hole in the ground is an illusion. It may just as well be an area of loose sand on top of the ground level or even a patch of rough grass. Where sand is expensive and drainage poor, the rough grass patches are very effective.

"If the advertisements of some new and wonderful thing in regard to grass excite your interest, try it by all means, but only in a small experiment.

"It is unfortunate that many greenkeepers incline to be secretive. Greenkeeping, like everything else, will advance with the spread of knowledge and not by keeping 'the light under a bushel.'

"If you are going to build a new golf course in the North, plan the work so the seeding can be done between August 15 and September 15.

"A hazard that is too severe is apt to defeat its object. The players purposely avoid taking the chance.

"It is well to be suspicious of the seedsmen who advise spring seeding of turf grasses in the North. The conditions are exceptional where spring seeding is justifiable.

"Before you try anything new in the way of greenkeeping except as a small experiment, better get the opinion of the Green Section. It may save you some money that might better be used otherwise."

COMMENTS ON THE APRIL, 1923, NUMBER OF THE BULLETIN

IT should be obvious to every golf club that uses vegetated creeping bent-grass that the golfing world owes an undying debt of gratitude to the men who developed the principles of the vegetative planting of bent. What has been done in 25 years since the historical dates cited are merely refinements; the basic principles still stand. New member clubs of the USGA should strive to borrow old copies of the BULLETIN in order to develop an appreciation of information available today. The supply of this number of the BULLETIN is exhausted so please do not write to the Green Section asking for this number.

Another fact is so glaring that one actually blushes. The information published 25 years ago on vegetative planting has been reprinted almost on an annual basis and the Green Section still gets letters asking the question, "We have heard of your new creeping bent. Where can we get seed and how much does it cost?" It is obvious that *education* actually is needed more than research. The Green Section staff would answer fewer letters

if all green committee chairmen would first consult with their course superintendents before writing for technical information.

In 1923, golf clubs could hold separate memberships in the Green Section and the USGA. On November 30, 1923, the Green Section membership was 643 and the USGA membership was 645. The majority but not all of these clubs were members of both the Green Section and the USGA.

Actually little has changed in 25 years—principally the people and some of the grasses. As personnel changes the same lessons have to be taught to a new group of people. The more frequent the change, the more difficult becomes the job of disseminating information. It is safe to say that, in the past 25 years, there has been *less* change among the course superintendents than among club management, especially green committees. It is hoped that suitable recognition ultimately will be given to the stabilizing influence of course superintendents on golf clubs through the one thing that makes the game of golf possible—*good turf on the course*.

CENTIPEDE GRASS FROM SEED

Lack of seed has discouraged the planting of Centipede grass for many years. Test plots of Centipede grass at the Coastal Plain Experiment Station, Tifton, Ga., have produced yields as high as 200 pounds of seed to the acre. The use of proper management practices may encourage seed

production sufficiently to make it commercially profitable. Dr. G. W. Burton, of the Tifton Station, has a limited quantity of seed for trial purposes. Anyone who is interested in obtaining a small packet of seed for testing may request it of Dr. Burton.

The Northern limit of the range of Centipede grass is not clearly known. One of the objects of distribution of seed is to

determine this limit. It is possible that some of the seedlings may possess qualities that make them more cold resistant than the ordinary Centipede grass.

Centipede grass makes a very desirable turf on poor, sandy, acid soils. It is tough, forms a dense turf, is low growing, has a pleasing color, withstands close cutting and heavy use, and the fertility requirements are low. The low-growing habit of Centipede grass contributes to its desirability for roadsides, airfields and similar areas. It is being used as a desirable grass in golf course roughs as far north as Greensboro, N. C.

PEST CONTROL SUPPLIES

Attention is invited to the Seventh Edition of "Entoma," a directory of insect and plant pest control, published by the Eastern Branch of the American Association of Economic Entomologists. This directory will be extremely valuable as a guide to sources of pest control materials and as an informational handbook. "Entoma" can be procured from Dr. G. S. Langford, Department of Entomology, University of Maryland, College Park, Md., at a cost of \$1.

RESULTS OF LEAD ARSENATE SURVEY

The November, 1947, number of *TIMELY TURF TOPICS* contained a questionnaire relative to the use of lead arsenate. This survey was made for the purpose of procuring information regarding the effectiveness of lead arsenate in the control of insect pests and turf weeds.

The response was disappointing. It is felt, however, that the information derived from the returned questionnaires is indicative of the results usually obtained from the use of lead arsenate.

In general, good results have been obtained in controlling insects with lead arsenate. Some of the data are obscured because other materials were used for control or because of a lack of infestation of various insects.

Of the reports received, 44 per cent indicated that crabgrass had been controlled by lead arsenate; 35 per cent reported that it had controlled chickweed; 17 per cent

reported that it had controlled *Poa annua*. Few reported control of pearlwort, clover, and other weeds. Only 22 per cent stated definitely that lead arsenate had not controlled weeds. Fifteen per cent stated that they were unable to determine whether lead arsenate had contributed to the control of weeds. There was no correlation between the soil type and the extent of weed control accomplished by the use of lead arsenate.

Amounts of lead arsenate applied were variable and many clubs did not have figures available regarding the amount or rate of application. It is felt that much of the success in weed control effected by the use of lead arsenate may be ascribed to controlling the insects that would weaken turf and allow weeds to come into the plant population. Weeds are inhibited by a vigorous turf but when the turf is weakened they are quick to take over.

BIBLIOGRAPHY OF LEAD ARSENATE LITERATURE

- GRAU, FRED V.—Control of Crabgrass and Other Turf Weeds with Chemicals. USGA Green Section, *BULLETIN*, Vol. 13, No. 3, p. 47. 1933.
- WELTON, F. A., AND CARROLL, J. C.—Crabgrass in Relation to Arsenicals—*Journal American Society of Agronomy*, Vol. 30, No. 10:816-826. 1938.
- VANDECAVEYE, S. C., HORNER, G. M., AND KEATON, C. M.—Unproductiveness of Certain Orchard Soils as Related to Lead Arsenate Spray Accumulations. *Soil Sci.*, Vol. 42, No. 3:203-213. 1936.
- WELTON, F. A., AND CARROLL, J. C.—Lead Arsenate for the Control of Crabgrass. *Journ. American Society of Agronomy*. Vol. 39, No. 6:513-521. 1947.

CONFERENCE DATES

February 21-24, 1949 Pennsylvania
H. B. Musser, Pennsylvania State
College, State College, Pa.

TURF FIELD DAYS

September 20-21, 1948 Pennsylvania
H. B. Musser, Pennsylvania State
College, State College, Pa.