

TIMELY TURF TOPICS

Issued By The

UNITED STATES GOLF ASSOCIATION GREEN SECTION

ROOM 307, SOUTH BUILDING
PLANT INDUSTRY STATION
BELTSVILLE, MD.

RESOLVED: TO EXCHANGE IDEAS AND EVALUATE PRACTICES

WINTER CONFERENCES: The Green Section has been notified of the following dates for 1948 conferences. You are urged to attend at least one of these conferences. They will be well worthwhile.

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| January 5-9 | Grounds Maintenance, Land Utilization and Management Conference, Department of the Army, Gravelly Point, Va. W. V. Kell. |
| January 6-7 | Southern Turf Association Conference, University of Tennessee, Knoxville, Tenn. J. K. Underwood. |
| January 10 | United States Golf Association Annual Meeting, Hotel Waldorf-Astoria, New York, N. Y. J. C. Dey, Jr. |
| January 12-14 | Conference on Turf in the Southwest, Texas A & M College, College Station, Tex. V. E. Schember. |
| January 15-16 | Mid-Atlantic Turf Conference, Lord Baltimore Hotel, Baltimore, Md. E. N. Cory, University of Maryland, College Park, Md. |
| January 26-28 | Oklahoma Turf Conference, Stillwater, Okla. R. C. Dunning, 271 West Victoria, Tulsa 6, Okla. |
| January 26-28 | Conference of U. S. Air Force Agronomists, Washington, D. C. R. H. Morrish, Room 5D 113, Pentagon Building. |
| February 9-13 | 19th Annual GSA Turf Conference and Show, Book-Cadillac Hotel, Detroit, Mich. A. L. Brandon, P. O. Box 106, St. Charles, Ill. |
| February 12-13 | Northeastern Weed Control Conference, Hotel Commodore, New York, N. Y. R. D. Sweet, New York State College of Agriculture, Ithaca, N. Y. |
| February 18 | Philadelphia Annual Turf Conference, Llanerch Country Club. C. K. Hallowell, Room 303, Drexel Building, 5th and Chestnut Sts., Philadelphia, Pa. |
| February 23-26 | 17th Annual Turf Conference, Pennsylvania State College, State College, Pa. H. B. Musser. |
| February 23-27 | New Jersey Turf Short Course, Rutgers University, New Brunswick, N. J. R. E. Engel. |
| February 27 | Post Engineers School Turf Field Day, Beltsville, Md. F. V. Grau. |
| March 1-3 | Purdue Turf Conference, Purdue University, Lafayette, Ind. G. O. Mott. |
| March 8-9 | Iowa Turf Conference, Iowa State College, Ames, Iowa. H. L. Lantz. |
| March 10-12 | Minnesota Turf Conference, Minneapolis, Minn. A. W. Anderson, 3540 24th St. South, Minneapolis, Minn. |

WHAT DO YOU WANT TO READ IN TIMELY TURF TOPICS? The Green Section is not always able to determine whether T-T-T contains information which is helpful and enjoyable to its readers. You are, therefore, invited to send to us your criticisms and suggestions so that in 1948 we may be better able to serve the needs of Turf.

AMERICAN SOCIETY OF AGRONOMY MEETINGS: The annual meetings of the American Society of Agronomy were held at the Netherland Plaza Hotel, Cincinnati, Ohio, on November 17-20, 1947. Two sections of the meetings were devoted to turf. One of the sections was comprised of papers on Turf Research, while the other dealt with the applied phases of turf management.

Abstracts of papers to be published in the Journal of The American Society of Agronomy will be presented after the articles have appeared in the Journal.

The following abstracts are taken from some of the papers dealing with applied phases of turf management.

Alta fescue promises to produce a turf that is highly wear resistant, that is easily maintained at low cost, and that responds to nitrogen feeding, although it appears to perform satisfactorily on soils low in nitrogen content. The addition of about 20 percent of Kentucky bluegrass to the seeding mixture appears to be desirable in areas where bluegrass is adapted. - G.O. Mott, Purdue University Agricultural Experiment Station.

Observations on fall-seeded plots of bluegrass at the end of one year showed that the best turf was on the plots seeded at the rate of 80 to 120 pounds to the acre and fertilized at the rate of 1600 pounds of 10-6-4 to the acre. Plots seeded at the rate of 40, 80, and 120 pounds to the acre did not suffer so badly from leafspot attacks as did those which were seeded at rates of 200, 400, and 600 pounds to the acre. Plots seeded in May were 95 percent crabgrass by fall. - A.E. Rabbitt, Navy Department.

Fertilizer treatments on large areas such as military reservations need to be adequate but should require a minimum of effort and expense. Most noticeable results in the Southwest have been obtained from the use of nitrogen fertilizers. In some cases iron sulfate has improved the appearance of turf on irrigated soils of high alkalinity. Additions of phosphorous, potash, and lime have produced no measurable effects on turf. The use of simple soil tests is recommended. - Burton F. Kiltz, Headquarters, Air Training Command.

One of the new and valuable lessons learned in the establishment and maintenance of turf on airfields is the use of irrigation systems in obtaining turf capable of withstanding intensive plane traffic in regions of low rainfall. Wherever adequate quantities of water were available, the costs of turf produced by irrigation were very economical as compared to the costs of providing similar facilities by paving or other mechanical means. Cost of establishment of Bermuda grass turf was \$165 an acre. The cost of an oil dust palliative was up to \$500 an acre and dust control was temporary. Two fields (one an irrigated turf field and the other a paved runway field, each of which had been subjected to 650 landings a day) entailed an annual maintenance cost of \$8,000 for the turf field, and \$29,000 for the paved runway field. - Sydney H. Watson, Office Division Engineer, Dallas, Texas.

Dust on airfields is a great hazard to aircraft because of damage to moving parts. Vegetative treatments of various types generally proved more effective than did mechanical treatments (paving or oiling). Approximately 40 percent more engine changes a month were necessary on fields where dust control was not adequate. - Howard B. Sprague, Texas State Research Foundation.

"Anchored vegetative mulch was used successfully on many airfields in the Western half of the United States to give immediate and comparatively permanent control of dust on earth scars and other bare areas. Mulching was feasible at any season, and was particularly valuable when moisture was inadequate for establishment of ordinary type plantings. This method of land treatment was less expensive and more effective in accomplishing dust control than such mechanical methods as gravel and cinder blankets, liquid asphalt treatments and light types of pavements. When properly accomplished, anchored mulch was nearly 100 percent effective in dust control with wind velocities in excess of 50 miles per hour. Mulched areas were protected from movement of soil on the treated areas, and they also were effective in trapping and holding soil material blown at ground level from other areas. Mulched areas proved to be exceedingly favorable locations for establishment of living plants, even under the most extreme desert conditions." - Howard B. Sprague, Texas State Research Foundation.

"Common sense is the most important part of the construction of any green. Stick to the middle of the road in size, pitch, contour, surrounding traps, steep slopes, but over-drain and over-sand the top-mix and the result should be good." - Taylor Boyd, Kenwood Golf and Country Club, Cincinnati, Ohio.

REPORT OF TURF COMMITTEE, AMERICAN SOCIETY OF AGRONOMY: These data were taken from the progress report of the Turf Committee presented to the Society at its annual meeting in Cincinnati, Ohio, in November 1947.

Turf Sports Fields: Over 18,000 individual fields, with an estimated "replacement value" of \$305,000,000.

Grass Areas in Parks: 250,000 acres, with an estimated replacement value of \$75,000,000.

Golf Courses: 2,930 nine-hole courses, with an area of 123,060 acres, and 1,887 eighteen-hole courses with an area of 149,073 acres. The total estimated investment is over one billion dollars.

Lawns: There are estimated to be about 15 million lawns in the United States. The average size of lawns is about 3,000 square feet, and the replacement value is over \$750,000,000.

Airfields: The number of airfields is 4,490. The area covered is 1,709,632 acres. Cost of establishment is estimated at \$170,963,000. Annual maintenance cost is over \$34,192,640.

Other Areas: Data were not available for acreage of grass in cemeteries, on roadsides, and on Army Ground Force Stations. Exclusive of these areas (which will be included in the 1948 report), the estimated value of turf in the United States exceeds \$2,500,000,000.

Recommendations: Research and educational facilities at colleges and universities are considered by the Committee to be wholly inadequate in relation to the value of the Turf industry. Only one state provides a complete research and extension program to meet the needs of the Specialized Uses of Grass. More agronomists trained in this field are needed. The Committee recommended a study, by states, of the funds available for research and education in turf in relation to the size and value of the industry. An evaluation of turf seeds and seed mixtures on the market will be given attention. Recommendation was made for the appointment of a committee to study the development of more efficient turf maintenance equipment. Grass breeders are urged to save material which may have uses for turf. More detailed fundamental studies on the response of grasses to nutrient elements were recommended.

The Turf Committee: G. W. Burton, E. B. Cale, M. E. Farnham, G. H. Jones, R. H. Morrish, G. O. Mott, H. B. Musser, O. J. Noer, A. E. Rabbitt, H. A. Schoth, H. B. Sprague, and F. V. Grau, Chairman.

CORRECT ADDRESSES FOR TIMELY TURF TOPICS: In order that our mailing lists may be brought up to date, and to insure your receiving T T T promptly, it is requested that you furnish us, as early as possible, your correct mailing address. Clubs which have changed officials may wish to have T T T sent to persons other than those who have received them in the past. It is the desire of the Green Section that wherever possible one copy of our publications be placed in the hands of the Chairman of the Green Committee, and the other in the hands of the Greenkeeping Superintendent. If additional copies are desired they are available at a subscription rate of one dollar a year.

USGA ANNUAL REPORT: Your attention is invited to the annual report of the United States Golf Association for 1947. The section containing the report of the Green Section Committee recounts some of the efforts and accomplishments of the Green Section during the year 1947.

INTERNATIONAL CROP IMPROVEMENT ASSOCIATION: At the annual meeting of the Association in Chicago, December 3-5, 1947, standards for certifying crop seeds and seeds of turf grasses were accepted. Standards for certifying the vegetative reproduction of turf grasses also were considered. New strains of turf grasses will be handled in accordance with ICIA standards so as to insure acceptance for certification by state certification agencies. Certification is the only known way of protecting and insuring the genetic purity of any crop seed or plant. [Note: Dr. Grau is a member of the Grass Committee of the ICIA.]

OREGON SEED GROWERS LEAGUE MEETING: At the request of Mr. E. R. Jackman, Secretary, and Mr. Roy Engbretson, President, of the Seed Growers League, Dr. Grau flew to Portland on the occasion of their seventh annual meeting, December 17-19, and addressed the group of 500 seed growers on the subject of "Eastern and Southern Markets for Oregon Fescues and Bentgrasses." The principal objective of the League members is to grow seeds that will produce the best possible turf. Consumers want the same thing. The range of adaptation to soils and climates, and the uses of many of the turf grasses now produced are too narrow and therefore the market for these seeds is limited. Growers and consumers are in agreement that the soundest program for the future will be based upon breeding, selecting, and testing of new strains of turf grasses in the consuming areas under the most rigorous conditions. One of the desirable qualities of Alta fescue, for example, is its ability to grow under a very wide range of conditions. The same characteristic is needed in bentgrasses and in the red fescues.

CHLORDANE FOR THE CONTROL OF MOLE CRICKETS ON LAWNS AND GOLF COURSES: Dr. E. G. Kelsheimer, Entomologist, Vegetable Crops Laboratory, Florida Agricultural Experiment Station, Bradenton, Florida, reports that Chlordane has been used successfully to control mole crickets in turf. D D T and benzene hexachloride were not satisfactory for this purpose because D D T is slow in its action and because the odor of benzene hexachloride makes it objectionable in residential areas.

Chlordane controls ants, chinch bugs, fall armyworms, and webworms. As a spray, as a dust, or mixed with fertilizer, Chlordane gives excellent control at rates as low as one pound to the acre. It may also be used as a bait.

On plots replicated five times, Chlordane was applied as a five percent dust at the rate of one pound of actual Chlordane to the acre and watered in. There was an average of nine dead mole crickets on each plot of 100 square feet.

Chlordane may be purchased as a 48 or 50 percent emulsion and as a 50 percent wettable powder. To be most effective, it should be applied before a rain or on areas where watering is practicable. It will kill crickets for as long as six weeks to two months after application.

Death results from ingestion, contact, and fumigation. Upon contact with Chlordane, crickets emerge from their tunnels, turn over on their backs, and have nervous quivers until death.