# THE BULLETIN

### of the

## UNITED STATES GOLF ASSOCIATION GREEN SECTION

BLDG., F, CONSTITUTION AVE. AND 7TH ST., WASHINGTON, D. C.

Entered as second-class matter April 21, 1926, at the post office at Washington, D. C., under Act of March 3, 1879 EDITORIAL OFFICES: P. O. BOX 313, PENNSYLVANIA AVENUE STATION, WASHINGTON, D. C.

#### WASHINGTON, D. C., JANUARY, 1932 (SUPPLEMENT)

#### INDEX TO VOLUME 11 (1931)

- Activated sludge as fertilizer, 117, 128, 130, 236, 240
- Airplane menace to wild fowl, 118
- Aluminum sulphate, 226
- Ammoniating superphosphate, 143
- Ammonium phosphate, 128, 236
- Ammonium sulphate for controlling clover, 18; as fertilizer, 128, 130, 236, 240 Annual bluegrass, 132, 149, 193, 242 Annual report of Green Section for 1930, 5
- Ants, 198
- Applying chemicals to turf, 218
- Arlington turf garden, report on for 1930, 5
- Arsenate of lead in controlling earthworms and white grubs, 16, 183, 186
- Artificial manure, 147
- Associations, greenkeepers', 22
- Atlanta Green Section, 46
- Bay Shore Golf Course, demonstration turi garden report, 190; turf maintenance at. 199
- Beach sand, Bermuda grass on, 199
- Beetle control, 16, 183, 186
- Bent grass:
  - Cocoos, 18
  - colonial: for putting greens, 131, 193, 242; for fairways, 133, 245: for the South, 193; change in scentific name of, 217
  - creeping: for putting greens, 131, 193, 242; for the South, 193
  - cutting, 210
  - fertilizing, 210
  - German mixed bent: for putting greens, 131, 193, 242; for fairways, 133, 245; for the South, 193
  - matting of, 170
  - seaside creeping: for putting greens, 18, 131, 193, 242; for the South, 193 southern use, 193
- velvet, as putting green grass, 131, 242
- Bermuda grass:
- controlling in bent greens, 206: fairway use, 181, 182, 184, 194, 199; fertilizing, 117, 197, 199, 200; sandy soil, 194, 199; treatment of, 176, 184, 194, 199, 201, 202, 225
- Bichloride of mercury, 70, 218
- Blanket grass control, 198
- Bluegrass: annual, as a putting green grass, 132, 149, 193, 242; bulbous, 193, 225;

- cutting and fertilizing, 210; Kentucky, as a fairway grass, 133, 193, 245; southern use, 193, 200
- Boca Raton Club, 6th hole, 119
- Bone meal, 17, 128, 130, 236, 240
- Brookline Country Club, fertilizing putting greens, 115 Brown-patch, 70, 197, 201, 205, 218
- Brush, mower, 144
- Bulbous bluegrass, 193, 225
- Bulletin, Green Section, circulation of, 13 Burning Tree Club, 11th hole, 151
- Calomel in brown-patch control, 70
- Carpet grass treatment, 185, 193, 194, 201
- Carpet weed control, 198
- Centipede grass, 193
- Central Ohio District Golf Association Green Section, 35
- Chemicals, applying to turf, 218
- Chemistry of fertilizers, 54
- Chicago District Golf Association Green Committee, 31
- Cleveland District Green Section, 50 Clover control, 18, 186, 226
- Coastal-plain turf problems, 178
- Cocoos bent, 18
- Colonial bent grass: for putting greens, 131, 193, 242: for fairways, 133, 245; for the South. 193; change in scientific name of, 217
- Compost preparation, 110; use, 110, 114, 115 Connecticut State Greenkeepers' Association,
- 49
- Cooperation, how it helps the greenkeeper, 138
- Corrosive sublimate in brown-patch control, 70; applying, 218
- Country Club of Buffalo, 16th hole, 227
- Country Club of Havana, 11th hole, 187
- Country Club of Virginia, 4th hole, James River Course, 103
- Crab grass control, 186, 198
- Crabs, land, controlling, 246
- Creeping bent grass for putting greens, 131, 193, 242; for the South, 193; cutting, 210: fertilizing, 210; matting of, 170; seaside, 131, 193, 242
- Crowfoot grass control, 186
- Cushion under turf, creating, 206
- Cutting at different heights, effect of on growth of grass, 210

- Demonstration turf gardens: 1930 reports, 9, 122, 190; 1931 reports, 230; three-year summary, 230
- Depew, Ganson; becomes chairman of Green Section. 3
- Detroit District Golf Association Green Section, 42
- Development of local green sections, 22
- Dictionary of fertilizers and fertilizer terms, 75
- Disease control, 70, 197, 201, 205, 218
- Dissolving chemicals, 218
- Drought of 1930, figures on and effects of. 154

Earthworm control, 16

Elm trees, transplanting, 246

- Fairways: Bermuda grass, 181, 182, 184, 194, 199; carpet grass, 185, 193, 194, 203; fertilizers, 130, 182, 192, 195, 199, 240; grass ratings at demonstration gardens, 133, 193, 245; sandy soil, 17; sprinklers and water system, 163
- Fertilizers: activated sludge, 117, 128, 130, 236, 240; ammonium sulphate, 128, 130, 236, 240; analysis table, 58, 75; apply-ing, 218; bone meal, 17, 128, 130, 236, 240; chemistry of, 54; consumption oi, 68; costs of, 60, 68; dictionary of fertilizers and fertilizer terms, 75; effect of when grass is cut at different heights, 210; fairway, 130, 182, 192, 195, 199, 240; lime, 128, 130, 23., 240; manure, 130, 147, 206, 240; mixed, 128, 130, 236, 240; mixing, 63; mushroom soil, 17, 113; nitrate of soda, 128, 236; nitrogen basis of, 59; poultry manure, 128, 236; production, 68; putting green, 106 to 117, 126, 192, 236; ratings of in demonstration gardens, 128, 130, 236, 240; selecting, 57; sulphate of am-monia, 128, 130, 236, 240; urea, 128, 236
- Fescue; cutting, 210; fertilizing, 210; results with on demonstration gardens, 131, 242, 245
- Field mice control, 113
- Forest Hills Country Club; 13th hole, 207; turf maintenance at. 194
- Fowl, wild, airplane menace to, 118
- Fungicides, applying, 218
- Fungous disease control, 70, 197, 201, 205, 218
- Gardens: Arlington turf, report on for 1930, 5; demonstration, reports on for 1930, 9, 122, 190; for 1931 and three-year summary, 230
- German mixed bent grass: for putting greens, 131, 193, 242; for fairways, 133, 245; for the South, 193
- Golf Service Bureau of New England, 37; of Pittsburgh, 28
- Goose grass control, 198
- Gopher control, 198
- Green Committee, Chicago District Golf Association, 31

- Green Section: annual report for 1930, 5; Bulletin, 13; local, development of and reports on, 22; meetings for 1930, 12; Metropolitan Golf Association, 25
- Greenkeepers' Association of Minnesota, 47; of New Jersey, 32; of Southern California. 43: of Westchester County, 47; of Western Michigan, 27
- Greenkeepers' Club of New England, 23; of Western Pennsylvania, 40
- Greens (See Putting greens)
- Ground spurge control, 198
- Grubs, controlling with arsenate of lead, 16, 183, 186

Hydrocotyle control, 198

Indiana Greenkeepers' Association, 34 Inverness Golf Club, 18th hole, 19 Irrigating system, 163

Japanese beetle killed by Typhia wasp. 181, 186

Kentucky bluegrass as a fairway grass, 133, 193, 245; cutting and fertilizing, 210

Land crabs, controlling, 246

- Layers, use of in building putting greens, 150
- Lead arsenate for controlling earthworms and grubs, 16, 183, 186
- Lead shot on turf, 226 Leaf rake, home made, 224
- Lime as a fertilizer, 128, 130, 236, 240; burning with, 170
- Live Oak Golf Club, oiled sand greens, 145
- Local green sections and associations, 22
- Long Island Greenkeepers' Association, 44

Maintenance Section, St. Louis District Golf Association, 33

- Manila grass, 193
- Manure as fertilizer, analysis table, 89; 130, 147, 206, 240; artificial, 147
- Marl, 17, 180, 199
- Matting of bent turf, 170
- Meetings, Green Section, for 1930, 12 Mercuric bichloride (corrosive sublimate), 70, 218; chloride (calomel), 70
- Methods of applying chemicals to turi, 218 Metropolitan Golf Association Green Section, 25
- Miami Beach turf garden, 190
- Mice, field, controlling, 113 Michigan and Border Cities Greenkeepers' Association, 43
- Mid-Atlantic Association of Greenkeepers, 36
- Mid-West Greenkeepers' Association, 30
- Mill Road Farm Golf Course, 17th hole, 247
- Mixed bent for putting greens, 131, 193, 242; for fairways, 133, 245; for the South, 193

- Mixed fertilizers for putting greens, 128, 236; for fairways, 130, 240; making, 63
- Mixing chemicals, 218; fertilizers, 63
- Moisture requirements of grass, with rainfall figures, 154
- Mole cricket control, 186, 201
- Moss, peat, use of on putting greens, 117
- Mower brush, 144
- Muck, 17, 117, 150, 180, 199
- Mushroom soil, 17, 113
- National Association of Greenkeepers of America, 46
- New Jersey State Golf Association Green Section. 48
- Nitrate of soda, 128, 236
- Oakley, Russell A., 175
- Oakmont Country Club, fertilizing putting greens, 114
- Oiled sand greens, 145
- Old Elm Club, 8th hole, 135
- Ontario Greenkeepers' Association, 39
- Organizations, green section, local, 22
- Ownership, statement of, 206
- Peat, 150; moss, 117
- Pennywort control, 198
- Philadelphia Association of Golf Course Superintendents, 41; Green Section and Service Bureau, 44
- Pinehurst, N. C., turf maintenance at, 182 Pipe, size to use, 163
- Plainfield Country Club, fertilizing putting greens, 112
- Plantain seed in bent seed, 226
- Poa annua (annual bluegrass), 132, 149, 193, 242; bulbosa (bulbous bluegrass), 193, 225
- Pocket gopher control, 198
- Poultry manure, 128, 236
- Precipitation 1925 to 1930. figures on, 154
- Problems of southern goli courses, 176 Punta Gorda Country Club, turi maintenance at, 201
- Putting greens: building, 150, 176 to 206; fertilizers for, 126, 192, 236: fertilizing and maintaining, 106 to 117; grass ratings at demonstration gardens, 131, 134, 193, 242; sand greens, 145, 182; southern, 176 to 206; top-dressing, 109 to 117, 134; winter top-dressing, 134
- Rainfall 1925 to 1930, figures on, 154
- Rake, home-made leaf, 224
- Ramsay, Herbert H., becomes president of United States Golf Association, 2
- Ratings of fertilizers and grasses at demonstration gardens, 122, 190; three-year. 230
- Redtop as a fairway grass, 133, 193, 245
- Report. Green Section, annual for 1930, 5: demonstration turf garden for 1930, 9, 122, 190; for 1931 and three-year summary, 230
- Rhode Island Greenkeepers' Association, 49 Rules of goli, 1931 edition, 133, 148

- Rye grass as a southern winter turf, 185, 193, 197
- Sand greens, 145, 182
- Sandy soil, preparation of, 17, 194, 199
- Seaside creeping bent grass for putting greens, 18, 131, 193, 242; for the South, **1**93
- Seeds, kinds and quantities of purchased by golf courses, 222; plantain in bent seed, 226
- Service bureaus, 22
- Shackamaxon Country Club, 5th hole, 171
- Shot, lead, on turf, 226 Sludge, activated, 117, 128, 130, 236, 240
- Snow, hastening the melting of on turi, 217
- Soil, sandy, preparation of for fairways, 17
- Soot, Scotch, use of on putting green, 116
- Southern turf problems, 176 to 206; demonstration turf garden, 190; grass ratings, 193
- Sprinklers, installation and tests, 163
- Spurge, control of, 198
- St. Lucie Bermuda grass, 193
- Sulphate, of aluminum, 226; of ammonia, 18, 128, 130, 236, 240
- Superphosphate, ammoniating, 143

Tampa, Fla., all year turf at, 194

- Top-dressing, 109, 110, 112, 114, 115, 117;
- winter, 134; in Texas, 206
- Transplanting elm trees, 246 Turf garden reports, 122, 190, 230
- Urea, 128, 236
- Vanderpool, Wynant D., resigns as chairman of the Green Section, 4
- Velvet bent grass, 131, 242

Wappoo Links, turf maintenance at, 184

- Water requirements of grass, 154; system installation, 163
- Weeds: annual bluegrass, 149; Bermuda grass, 206; blanket grass, 198; carpet weed, 198; clover, 18, 186, 226; crab grass, 186, 198; crowloot grass, 186; goose grass, 198; ground spurge, 198; hydrocotyle, 198; pennywort, 198; plantain seed in bent seed, 226; yard grass, 198
- Western New York District Greenkeepers' Association, 38
- Westwood Country Club, 17th hole, 51
- White grub control, 16, 183, 186
- Wild fowl, airplane menace to, 118
- Wilshire Country Club, fertilizing putting greens, 110
- Winter-course problems, 176 to 201; winter greens in the South, 182 to 201: winter top-dressing, 134
- Wisconsin Greenkeepers' Association, 45 Women's National Goli and Tennis Club, 7th hole, 71
- Woodward, Frank L., 4

Yard grass control, 198

#### AUTHORS' INDEX

Arnott, Robert F.

New Jersey State Golf Association Green Section, 48

Baker, O. Sproule Bingham, C. L. Brandon, A. L. Bretzlaff, Carl A. Burnham, R. B.

Conroy, William

Dahl, Arnold S. Depew, Ganson Dolson, Terry Dunt, William E. Dustin, John F.

Farnham, M. E. Farrant, Howard D. Fletcher, C. C.

Greenfield, Robert S.

Hane, J. Keitt, Jr. Harrison, C. M. Hartgering, J. McRae Hinman, Thomas P. Hoerger, Fred

Isleib, H. T.

Loeffler, Emil Lyon, James A.

McClure, George M. Maples, Frank Miller, Lois Milnes, G. W.

Mitchell, Robert A. Monteith, John, Jr.

. .

Nickerson, Evelyn C. Niederlander, D. R.

Pahl, Erich W. Peckham, R. N. Peters, Guy M. Power, Robert E.

Quaill, John

Read, H. Kendall Roth, F. J.

Sansom, W. J. Smith, William Staebner, F. E. Stephen, Arthur

Taylor, Wright D. Tower, Ray

Walker, Charles Welton, Kenneth Fertilizing Bermuda greens for winter play, 117 Wisconsin Greenkeepers' Association, 45 Mid-West Greenkeepers' Association, 30 Indiana Greenkeepers' Association, 34 Connecticut State Greenkeepers' Association, 49

Greenkeepers' Association of Westchester County, 47

Methods of applying chemicals to turf, 218 How cooperation helps the greenkeeper, 138 A winter course on a limited budget, 201 Mid-Atlantic Association of Greenkeepers, 36 Greenkeepers' Association of Western Michigan, 27

Philadelphia Association of Golf Course Superintendents, 41 Fertilizing putting greens at Brookline, 115 Preparing mixed fertilizers on the golf course, 63

Fertilizing putting greens at Wilshire, 110

Turf maintenance at Wappoo Links, Charleston, S. C., 184 Effects of cutting and fertilizing on the growth of grass, 210 Detroit District Golf Association Green Section, 42 Atlanta Green Section, 46 Bermuda turf on beach sand, 199

Greenkeepers' Association of New Jersey, 32

Fertilizing putting greens at Oakmont Country Club, 114 Greenkeepers' Association of Southern California, 43

Central Ohio District Golf Association Green Section, 35 Bermuda turi and sand greens at Pinehurst, N. C., 182 Golf Service Bureau of Pittsburgh, 28 Green Section and Supply Section of Metropolitan Golf 'Association, 25

Greenkeepers' Club of New England, 23

Demonstration turf garden reports (summary from 14 gardens for 1930), 122

Demonstration turf garden results: a three-year summary, 230 Experimental results at Miami Beach, Fla., 190

Golf Service Bureau of New England, 37 Maintenance Section, St. Louis District Golf Association, 33

Greenkeepers' Association of Minnesota, 47 Rhode Island Greenkeepers' Association 49 Green Committee, Chicago District Golf Association, 31 Cleveland District Green Section, 50

Greenkeepers' Club of Western Pennsylvania, 40 National Association of Greenkeepers of America, 46

Philadelphia Green Section and Service Bureau, 44 Experience with fertilizers at Plainfield Country Club, 112

Ontario Greenkeepers' Association, 39 Michigan and Border Cities Greenkeepers' Association, 43 Suggestions on installation and use of fairway sprinklers, 163 Western New York District Greenkeepers' Association, 38

How we built our oiled sand greens, 145 All-year turf at Tampa, Fla., 194

Long Island Greenkeepers' Association, 44 Demonstration turf garden reports (summary from 14 gardens for 1930), 122 Demonstration turf garden results: a three-year summary, 230