INDEX TO VOLUME 13 (1933)

Accounting, books on, 71
Accuracy in application of materials to turf, 7
Acidity of soil: Kentucky bluegrass as affected by, 23; peat and fertilizers, effect of, 103, 196
Activated sludge, 17
Ammonium sulphate (see Sulphate of ammonia)
Ammonium thiocyanate in weed control, 50, 158
Annual bluegrass, getting rid of, 149
Annual report of Green Section for 1932, 2; for 1933, 200
Ants, bulletin on, 71
Application of materials to turf, 7
Architecture, books on, 67
Areas, measuring, 9
Arnott mechanical putter in determining drift and speed of ball, 74
Arsenic compounds in weed control, 51, 158
Ball, putted, speed and drift of on bents, 74
Barrel cart, regulating, 17
Beetle, Japanese, bulletins on, 71
Bent grass: Cocoos (seaside) as compared with Washington, lime beneficial to, 85; nursery going to seed, 203; putting tests on with mechanical putter, 74; renovating turf of, 19; shade, effect on, 131; seeding rate, 84
Bermuda grass: controlling in putting greens, 87, 179; fine-textured, seed of, 82; nursery, 82; utilizing local strains of, 151
Birds, bulletins on, 67
Bluegrass: annual, getting rid of, 149; cutting height for, 86; Kentucky, response of to fertilizing, cutting, acidity, and temperature, 23; fairways, fertilizing, 17, 82, 183; Kentucky and Canada, usefulness of as affected by their habits of growth, 140
Buffalo grass for fairways, 144
 Bulletin, missing numbers of, 16
Cachaza (sugar-mill filter-cake) as fertilizer, 85
Calcium: chloride and nitrate, effect of on bluegrass, 23; cyanamid in weed control, 158; (see also Lime)
Canada bluegrass, usefulness of compared with Kentucky bluegrass, 140
Charcoal injurious to soil, 105
Chart, ready reference for rates of applications, 13
Chemicals in weed control, 47, 154
Chemistry, books on, 68
Chlorates in weed control, 175
Clay soils, treatment of with organic materials, 96, 107
Clearing land, bulletins on, 68
Clover: controlling, 18; effect of lime on, 85
Cocoos bent as compared with Washington bent, 119
Construction, books on, 69
Cost accounting, books on, 71
Crapgrass control, 18; with chemicals, 47, 154; with fertilizers, 195
Creeping bent grass (see Bent grass)
Cutting: effect of on growth of tops and roots, 130; height for fairways, 86; effect on weed growth, 18
Cutworms, bulletins on, 71

Developments in turf maintenance, recent technical, 42
Disease: books on, 68; fertilizing and drainage, effect on, 136; fungicides, applying, 7, 17, 143; proprietary remedies for, 86; slime mold fungus, 203; temperature and moisture effect on, 53; toll from plant diseases, 110
Distributing machine, regulating, 14, 17
Drainage: books and bulletins on, 68; effects of on turf diseases, 136; peat and other organic material for improving, 90
Drift and speed of putted ball on bents as measured by mechanical putter, 74
Drought, remedying effects of, 19
INDEX TO VOLUME 13 (1933)

Earthworms, bulletins on, 71
Engineering, books on, 71
Entomology, books on, 68

Fairways: applying materials to, 7; bluegrass, treatment, 23; buffalo grass for, 144; cutting height, 86; fertilizing, 17, 82, 183; measuring areas of, 10; problems need more research, 22; weed control, 18, 82

Fertilizers: acidity of, 23, 103; activated sludge, 17; applying, 7, 17; books and bulletins on, 68; concentration variations, effect of, 122; for fairways, 183; height of cut as related to, 23; manure, 17, 93; organic and inorganic compared, 197; sugar-mill filter-cake, 85; turf diseases as affected by, 136

Fertilizing better than reseeding, 6, 183
Fescue, seeding rate, 84
Filter-cake, sugar-mill, as fertilizer, 85
Flowering plants, books and bulletins on, 70
Fungicides: applying, 7, 17, 143; proprietary, value of, 86

Grasses, books and bulletins on, 69
Greenhouse, growing turf in, 119
Green-manure crops, 46
Green Section, annual report for 1932, 2; for 1933, 200
Greens (see Putting greens)
Grubs, bulletins on, 71

Illumination, variations in as affecting growth, 131
Insecticides, apply, 7
Insects, books on, 68
Iron sulphate in weed control, 51, 168
Ivy and sumac, poison, bulletins on, 71

Japanese beetle, bulletins on, 71
Kentucky bluegrass (see Bluegrass)

Landscaping, books and bulletins on, 70
Lawns, books and bulletins on, 70
Layers, injurious soil, resulting from faulty topdressing, 118
Lead arsenate in weed control, 51
Library, greenkeeper's, books and pamphlets for, 66
Light, conditions of as affecting growth, 131
Lime: concentration, variations in as affecting growth, 128; effect on bent greens containing clover, 85; effect on bluegrass, 23
Locust, migratory, 110

Magnesium concentration, variations in as affecting growth, 129
Maintenance of turf, recent technical developments in, 42
Manure: green, soy beans for, 46; stable, 17; weeds seeds in, 93

Mathematics, books on, 71
Measuring areas, 9
Mechanical putter, measuring drift and speed of ball on bents with, 74
Meetings, Green Section summer, in 1932, 5; in 1933, 201
Moles, bulletins on, 71
Muck: classification of mucks, 111; definition of, 91; formation of, 111; use of, 90
Municipal golf courses, publications on, 69

Nitrate of soda as reducing soil acidity, 103
Nitrogen concentrations, variations in as affecting growth, 122
Nursery, bent, going to seed, 203

Organic materials, use of, 90; organic content of soil as affected by inorganic and organic fertilizers, 197

Peat: classification of peats, 111; definition of, 91; formation of, 111; use of, 111, 149
Phosphorus concentrations, variations in as affecting growth, 123; increase and penetration of in soil, 196
Physics, books on, 71
Planting putting greens, cost of use of stolons and seed compared, 86
Plantings, books and bulletins on, 70
Poison ivy and sumac, bulletins on, 71
Potassium concentrations, variations in as affecting growth, 123; chlorate in weed control, 175
Putted ball, drift and speed of on bent grasses, 74
Putter, mechanical as used in measuring drift and speed of ball, 74

Putting greens: applying materials to, 7; Bermuda grass control, 87; lime as beneficial to, 85; measuring areas of, 9; renovating, 19, 87; reseeding, 87, 150; preparing for spring planting, 118; seeding rate, 84; stolon and seed, comparative costs of, 86; watering, 150

Rain-making devices, 182
Report, Green Section, annual for 1932, 2; for 1933, 200
Reseeding putting greens, 87, 150
Rodents, destruction from, 182
Rose bushes, fertilizing, 150

Salt concentration prevented by use of peat, 100
Sandy soil, preparation of, 149
Scientific developments in turf maintenance, 42
Seaside creeping bent: compared with Washington bent, 119; drift and speed of ball on, 74; seedling rate, 84; (see also Bent grass)
Seed: Bermuda grass, 82; guarantees, 119; identification of by use of violet rays, 135
Seeded and stolon-planted putting greens: drift and speed of ball on, 74; costs of compared, 86
INDEX TO VOLUME 13 (1933)

Seeding: bent and fescue rate, 84; putting greens, 87, 150
Shade, effect of on velvet bent and Metropolitan creeping bent, 131
Shelter, storm, revolving, 52
Shrubs, books and bulletins on, 70
Slime mold fungus, 203
Sludge, activated, 17
Sodium arsenate, arsenite and chlorate, in weed control, 50, 154
Soils: acidity of as affected by peat and fertilizers, 103; books and bulletins on, 72; sandy, preparation of, 149; steam sterilization of, 150; improving structure of, 99, 103, 107; organic content of as affected by fertilizers, 197
Soy beans as green-manure crops, 46
Speed and drift of putted ball on bentns as measured by mechanical putter, 74
Sprayers, regulating, 14, 17
Steam sterilization of soil, 150
Stolon-planted bents: cost of compared with seeded bents, 86; drift and speed of ball on, 74
Storm shelter, revolving, 52
Sugar-mill filter-cake as fertilizer, 85
Sulphate of ammonia: acidifying effect of, 103; bluegrass as affected by, 23; weed control with sulphate of ammonia and sulphate of iron, 51, 168.
Sulphur concentrations, variations in as affecting growth, 130; water for irrigation purposes, 203
Surveying: books on, 71; measuring areas, 9
Technical developments in turf maintenance, recent, 42
Tees: grade for, 19; grass for, 19, 151
Topdressing: applying, 7; layers formed from, 118; peat and muck, 108
Trees, books and bulletins on, 70
Urea, acidifying effect of, 103
Velvet bent (see Bent grass)
Washington creeping bent (see Bent grass)
Water supply, bulletins on, 73; sulphur water for irrigation, 203
Watering: as affecting occurrence of brown-patch, 62; as affecting weed growth, 18; putting greens, 150; sulphur water, 203
Weeds: annual bluegrass, 149; Bermuda grass, 87, 179; books and bulletins on, 73; chemical control of, 47, 154; crabgrass, 195; cutting turf, effect of on, 18; fairway, 82, 195; poison ivy, bulletins on, 71; seeds of in manure, 93; watering, effect of on, 18; (see also Clover, also Crabgrass)
Winter yellowing of turf, 83
Yellowing of turf in winter, 83
AUTHORS' INDEX

Conover, Thornton
Weeding Bermuda grass out of creeping bent turf, 179

Dahl, Arnold S.
Effect of temperature and moisture on occurrence of brownpatch, 53
Effect of watering putting greens on occurrence of brownpatch, 62
Relationship between fertilizing and drainage in the occurrence of brownpatch, 136

Depew, Ganson
Annual report of the Green Section for 1932, 2
Annual report of the Green Section for 1933, 200

Evans, Morgan W., and Ely, John C.
Usefulness of Kentucky bluegrass and Canada bluegrass in turfs as affected by their habits of growth, 140

Grau, Fred V.
Control of crabgrass and other turf weeds with chemicals, 47
Drift and speed of putted ball on bents as determined by mechanical putter, 74
Obtaining accuracy in the application of materials to turf, 7
Use of sodium chlorate and other chemicals in controlling turf weeds, 154

Harrison, C. M.
Greenhouse studies on growth of Kentucky bluegrass, 23

Monteith, John, Jr.
Recent technical developments in turf maintenance, 42
Use of peat and other organic materials on golf courses, 90

Reid, Mary E.
Effect of shade on the growth of velvet bent and Metropolitan creeping bent, 131
Effect of variations in concentration of mineral nutrients upon the growth of several types of turf grasses, 122

Savage, David A.
Buffalo grass for fairways in the Plains States, 144

Welton, Kenneth
Books and pamphlets for the greenkeeper's library, 66
Use of peat and other organic materials on golf courses, 90
Fertilization of fairways: some experimental results, 183