

putting conditions regardless of the grass used. The only standards we can use are the putting greens of bentgrass which are as close to perfection as scientific greenkeeping can make them.

Those who use Bermudagrass, or any other grass, for their putting greens still are faced with the responsibility of producing a putting surface that putts like bent.

QUESTIONS AND ANSWERS

The answers below are in reply to actual questions received by the USGA Green Section staff in correspondence or at turf conferences and meetings. In some cases the question has been rephrased. Since the authorship of many questions received at meetings is in doubt, references to location are omitted

Alta Fescue

QUESTION—Alta fescue has been the subject of a great deal of controversy at our club. Will you please give us your concept of the use of Alta fescue as a turf grass?

ANSWER—The report of the Turf Committee of the American Society of Agronomy for 1948 (*Journal, American Society of Agronomy*, Vol. 40, No. 12, December, 1948, p. 1140, republished in the *USGA JOURNAL*, Winter, 1949) cites Alta fescue and Kentucky 31 fescue as having merit as turf grasses and suggests expanded study on their use.

The USGA Green Section consistently has encouraged widespread test plantings on golf-course tees and fairways, on lawns in mixtures with other adapted permanent species, on airfields, roadsides and athletic fields. Without citing innumerable case histories, it can be said with assurance that these two tall fescues have won a high place on most turf areas over a wide range of climate and soils.

The virtues of the tall fescues as turf grasses are: (1) they are drought tolerant but will also tolerate "wet feet"; (2) they are deep rooted; (3) they are resistant to weed and clover invasion; (4) they are tolerant of insects; (5) they are retentive of good color throughout the year; (6) they are capable of combining with other turf grasses.

Their major disadvantages include: (1) coarse texture (which is less objectionable with age, in mixtures and when closely mowed); (2) susceptibility to certain diseases in the early stages of growth (which so far are not particularly destructive).

Mowing Lawngresses

QUESTION—Please supply me with complete information on the type of lawngress that does not need mowing.

ANSWER—To our knowledge the lawngress that does not need mowing is not in existence or has not yet been discovered. One of the things that makes a good lawn is frequent mowing. There are some grasses that need less

frequent mowing than others. One of these is centipedegrass. This grass has been adequately described by Dr. G.W. Burton of Tifton, Ga., in the January, 1949, issue of the *Southern Seedsmen*. Another grass which has possibilities for lawns and which will tolerate less frequent mowing than the ordinary turf grass is Zoysia. Neither of these grasses will produce a satisfactory lawn unless it is mowed at least occasionally. Lawns of dichondra on the Pacific Coast rarely need mowing, but this plant has not found adaptation in the Southeast. We suspect that your question was prompted by advertisements proclaiming "the fact" (erroneously) that centipedegrass does not need mowing.

Construction and Maintenance

QUESTION—Please send me complete information on how to build and maintain a golf course.

ANSWER—A golf-course architect is the proper authority to consult on building a golf course. You can obtain a complete list of the members of the American Society of Golf Course Architects from the Secretary, William B. Langford, 2405 Grace Street, Chicago 18, Ill. Those best qualified to maintain golf courses are the experienced golf-course superintendents. The secretary of the Greenkeeping Superintendents' Association is A. M. Brown, P. O. Box 106, St. Charles, Ill. Our office does not profess to have on its staff either a golf-course architect or a golf-course superintendent, but since we are a nonprofit research and educational organization, we work with both groups. At the present time the USGA is in the process of preparing a book on the subject of turf management for golf courses which will embody principles of architecture and maintenance. Until the book is published early in 1950 we would suggest that you consult architects and superintendents to get the fundamentals of building and maintaining a golf course.