

USDA Turfgrass History

Research Roots

The U. S. Department of Agriculture (USDA) has supported the investigation of grasses for agricultural purposes from its very founding. The *Report of the Commissioner of Agriculture for the Year 1862* gives statistics for “the Hay Crop” for both “loyal” and “disloyal” states,¹ and also describes a “garden of the Department” on what is now known as the National Mall where “about one-half of the surface was occupied in grass, which is being put under culture.”² In 1865, an experimental farm was added to the Department’s garden, and in a report by George Reid, superintendent of the farm, a variety of [Grasses and Clovers](#) planted at the farm are listed, including fescues, rye-grass, Poa grasses, and grasses with intriguing names such as “cocksfoot grass” and “soft hairy cockle grass.”³

Key Scientists and Research Highlights

[George Vasey](#) was the USDA’s Chief Botanist from 1872 until 1893, and his publications on the grasses of the United States are some of the most influential early work on this topic.

In 1895, Congress established the [USDA Division of Agrostology](#) “for the investigation of the native and foreign fodder plants.”

The USDA Division of Agrostology’s first agrostologist [Frank Lamson-Scribner](#) acknowledged that “[h]ow to establish lawns and the varieties of grasses best suited for the purpose are among the most frequent inquiries received by the Division of Agrostology.”

In his career as a botanist and agrostologist with the USDA, [Albert Spear Hitchcock](#) devoted himself to the taxonomy of grasses and authored the authoritative 1935 [Manual of the Grasses of the United States](#).

[Agnes Chase](#), collaborator and then successor of Hitchcock, published the [First Book of Grasses: the structure of grasses explained for beginners](#) in 1922.

[Charles Vancouver Piper](#) and colleague [Russell A. Oakley](#) are best known for their ground-breaking work on golf course turf and for establishing the first experimental garden for turfgrass.

USDA scientists grew, evaluated and selected improved grasses for putting greens at the

[Arlington Turf Gardens](#),

The U.S. Golf Association (USGA) created an office known as the “[Green Section](#)” that worked closely with the USDA on “the scientific and technical aspects of turfgrass maintenance.”

[Fred V. Grau](#) was a turfgrass innovator and a director of the USGA Green Section while at the Arlington Turf Gardens and the Beltsville Agricultural Research Center in Beltsville, Maryland.

[Glenn W. Burton](#) developed many important bermudagrasses and other species for use on lawns, golf courses, and pastures. His releases have been used worldwide and have improved the quality of turf in many regions.

A leading authority on turfgrass, [Felix V. Juska](#) led the USDA Turfgrass Laboratory in Beltsville, Maryland, from 1953 to 1973.

[Angus “Gus” Hanson](#) served as a research agronomist with the Crops Research Division of the Agricultural Research Service, co-authoring an important reference on U.S. grasses with colleague Felix Juska.

[J. Jack Murray](#) collected zoysiagrasses in native stands in the Far East and developed the first seeded zoysiagrass cultivars.

[Wayne W. Hanna](#) developed improved bermudagrasses that have reduced water and pesticide use on golf courses, sports fields, and home lawns.

¹ “The Hay Crop” in “Reports and Tables of Agricultural Statistics,” *Report of the Commissioner of Agriculture for the Year 1862*. (Washington: Government Printing Office, 1863), 553.

² “Report of the Superintendent of the Garden Attached to the Department of Agriculture,” *Report of the Commissioner of Agriculture for the Year 1862*. (Washington: Government Printing Office, 1863), 541.

³ “Report of the Superintendent of the Experimental Farm,” *Report of the Commissioner of Agriculture for the Year 1865*. (Washington, Government Printing Office, 1866), 30.