

GENERAL BACKGROUND

The 1981 growing season at the Hancock Turfgrass Research Center was generally warm and dry. Rainfall was concentrated in infrequent but heavy storms that occurred on and around May 10, June 14, June 21, July 27, and from August 27-September 4. The last week of June through mid-August was essentially dry. What a contrast from the 1980 season where measurable precipitation was recorded a minimum of every other day from July through September. Thus, there was favorable weather for establishing the Hancock Turfgrass Research Center, and the bulk of seedings were made during the mid-summer period.

Irrigation

The Research Center has been designed to allow 60x60 foot or (18x18 meter) areas for research investigations (Table 1). The irrigation system is designed to have 4 head coverage over nearly all of a 60x60 ft. "square" to provide uniform water application. Several of these squares are adjacent to each other forming a "block" where the irrigation timing can be controlled independently of other blocks. Blocks are separated by 5 foot or greater aisles to help reduce the chances of irrigating on adjacent blocks, especially during windy periods.

Areas designed specifically for irrigation research include nine 40x40 foot areas where three irrigation treatments can be replicated 3 times. There are three of these areas on the research site.

All of the research area has been irrigated as needed to prevent wilt and promote growth. Differential treatments will begin in the 1982 season.

Mowing

The section of land north and west of the building is being maintained at putting green height. This area is approximately 1.75 acres and will be mowed as one large green

To the north and east of the building is the closely mowed lawn or fairway turf area. This area is being maintained at 1" to facilitate Poa annua seed-head development. It will later be mowed down to 3/4" for research. Approximately 2 acres are being maintained at this cutting height.

The area south of the building is all dedicated to the evaluation of lawn turfs. This area will be mowed at 1.75 inches. The area encompasses approximately 4.5 acres.

Weeds and Weed Control

If you have time, either before or after the formal program, you may walk the research site and view the various species, varieties and dates of seeding. It is particularly interesting to note that mid-summer seedings are suffering from a severe invasion of summer annual grassy weeds. Barnyard grass and, in some cases, crabgrass are competing strongly with the turfgrass. We will await a freeze this fall to eliminate these weedy pests.

Annual broadleaf weed invasion was also severe in many of the mid-summer seedings. Spurge, purslane, pigweed and lambs quarters provided excessive competition. On August 18, Trimec at 1/2 rate was sprayed on all areas except the greens. A slight amount of growth repression was noted in the seedling blue-grasses. However, the treatment was effective in reducing the competition from these weeds.

Fertilization

The plot areas have been fertilized to promote establishment. Based on soil tests, potassium and phosphorus were found to be none-limiting. Thus, most of the research areas have received only urea. A total of four pounds of Nitrogen per 1000 square feet have been applied to all areas north of the building except the topsoil, Purr-Wick, and sand-peat greens. The nitrogen was applied in 4 applications in approximately 2 week intervals during July and August.

On the south side of the building, areas with young seedlings have received 2 pounds of nitrogen per 1000 square feet and those that were seed prior to July 27 have received 4 pounds of nitrogen per 1000 square feet.

This represents a high level of fertility that is being used to rapidly increase the density of the turfgrass plots for turfgrass research in 1982.

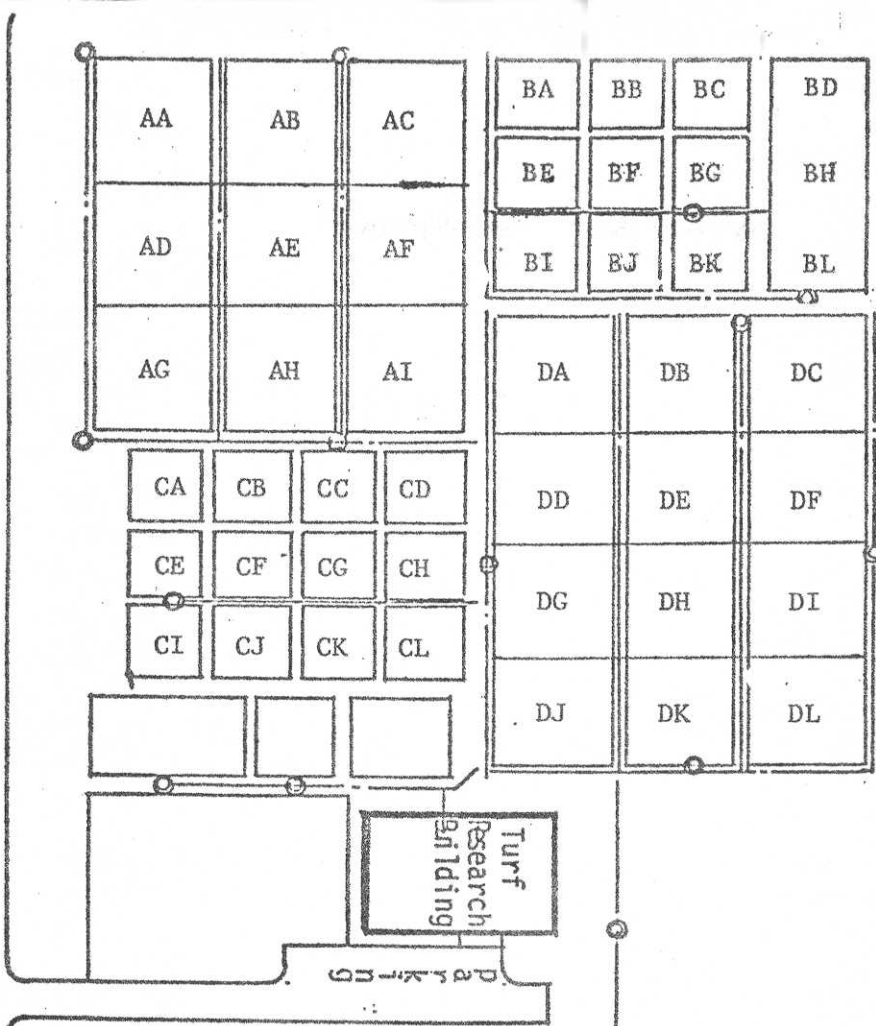
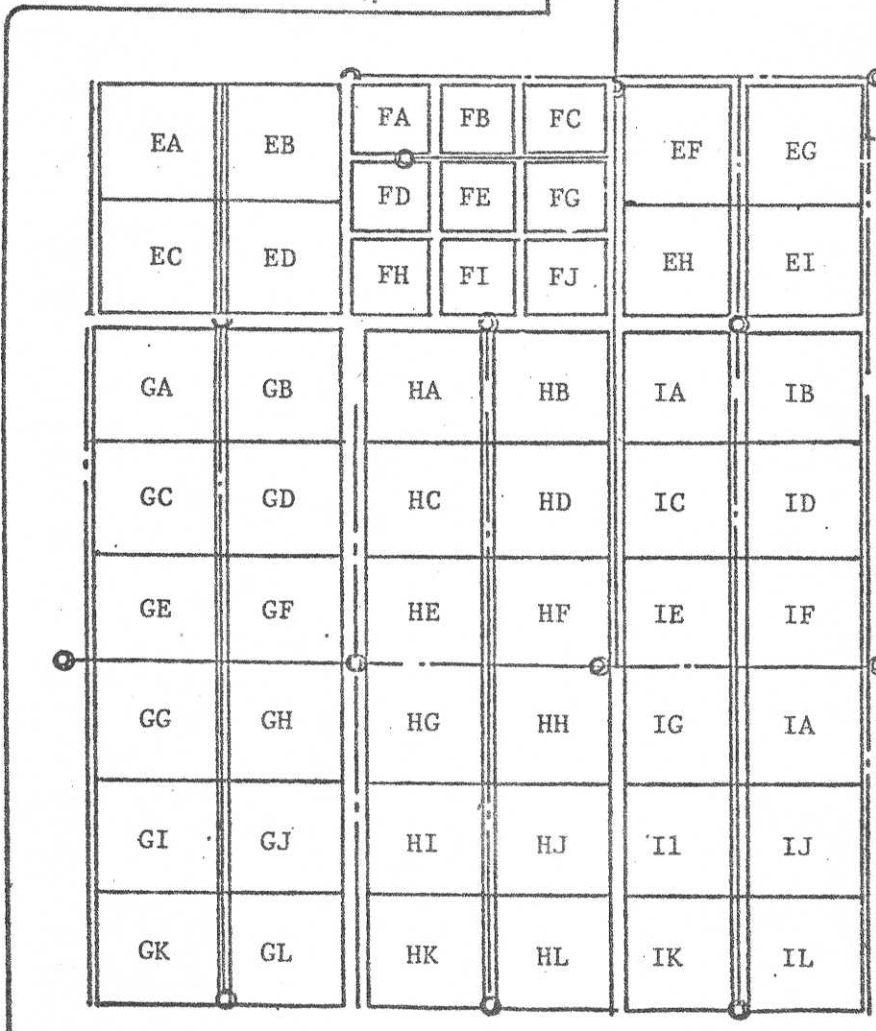


Table 1.



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