PROFILE

Southern Turf Nurseries

One of the success stories of warm season sod production is Southern Turf Nurseries of Tifton, Georgia.

Started in 1950 by Ray Jensen, a soil scientist with the USDA, Southern Turf Nurseries has an amazing record. Located near the USDA Research Center in Tifton where Glenn Burton bred his "Tif" series of bermudagrass, Southern Turf responded quickly to advances in turfgrass breeding. Jensen was the first to produce seed of centipedegrass and is one of three suppliers of the seed today. He and his staff developed the equipment necessary to plant and harvest sprigs of bermudagrass, centipede, and St. Augustine and plugs of zoysiagrass. In 1960, Southern Turf started production of warm season sod.

Jensen's creative and aggressive business sense was continued by the purchase of the company in 1976 by Charles Nash and E.G. Pope of Atlanta, partners of Tech Industries. In 1978, Southern Turf Nurseries entered into an agreement with Anheuser Busch to utilize brewery effluent to irrigate sod fields adjacent to breweries. The first project in Jacksonville, and another to begin soon near the Williamsburg, VA, brewery solve two problems for the makers Budweiser, Busch, and Michelob; that of effluent treatment and fertilizer needs of the farm. The effluent is rich in nitrogen and is naturally percolated through the sod field soil to the water table. The Jacksonville project produces 300 acres of sod.

Another major step for the company is the recent joint project with Lofts Pedigreed Seed Co., the creation of Sunbelt Seeds. Based in Tucker, Georgia, Sunbelt will market a complete line of overseeding mixtures and warm season turfgrass seed. The company plans to provide considerable technical assistance to southern turf managers.

An existing specialty of Southern Turf is its experience with planting southern athletic fields. In 25 years it has planted more than 2,000 sports fields, including the Orange Bowl in Miami, the Atlanta stadium, and part of Augusta National Golf Course. It has exported and planted fields in 15 foriegn countries, including Saudi Arabia, Japan and Israel. It provided much of the stolons for many of Hawaii's famous golf courses.

Today, Southern Turf Nurseries is the largest producer of warm season turfgrasses in the world.

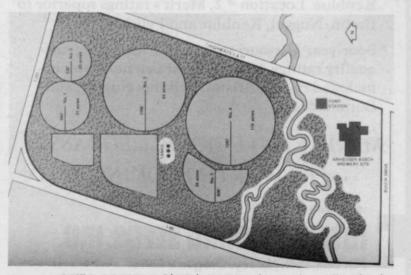


Diagram of effluent project with Anheuser Busch in Jacksonville, Florida.

Grether, a tomato and sugar beet farmer in Ventura, CA, planted bermudagrass in part of his acreage in 1958. By 1965, he had 150 acres of sod and 1,100 acres by 1971. Grether is credited with the first net laying devise and the use of fork lifts for sod handling. Today, nearly all of the 1,100 acres is netted. Grether retired in the mid 70's and was followed by Ralph Daily, who improved the net layer and has helped its rise in use today.

According to Daily, the netting permitted planting sod fields that otherwise could not have been planted. Grether's net layer buried the edges of the netting. Daily improved this by a glue applicator for the joining edges of netting.

Warm season sod production faces a greater challenge with offtypes in fields. For example, if bermudagrass gets established in a field of St. Augustine, or visa versa, it must be dug out by hand to remove all viable stolons. Broadleaf weeds are kept under control by herbicides, but grassy weeds require extra effort. Often, mowing crews will spot for offtypes and flag them for control.

Fumigation is very common in warm season sod production and necessary for certified sod. Fields are first fumigated and inspected. Usually, the certified stolons are planted in one foundation block, or field. Other fields are planted by expanding out of that block. The fields are continuously rogued for offtypes. Inspectors make unannounced visits to check the fields prior to harvest.

Irrigation has been essential in the south and west. Large mobile systems are common fed either by wells or lakes. Early proponents and problem solvers in irrigation include Toro's Jim Watson and Weathermatic's Jim Watkins. Fumigation and irrigation are significant in terms of cost to the grower. Without them, however, the job would be nearly impossible.