

# PURSLEY TURF GRASS: WARM CLIMATE SOD SPECIALISTS

Florida in the summertime is hot and humid. Away from Disney World, Floridians relax in air conditioned cars and buildings. Except for armadillos, cattle egrets, an occasional sandhill crane . . . and sod farmers!

Just outside of Palmetto, not too far from the Gulf coast, 1,200 acres of sod keep 33 people working long hours. Planting, mowing, fertilization, irrigation, harvesting, and hauling must be done during the heat of the day.

Pursley Turf Grass is a unique operation in Florida. Incorporated in 1956 as Pursley Zoysiagrass Company, Walter Pursley, president, and Stan Cruse, vice-president, grew *zoysia matrella* sod. Meyer Z-52 came along and Pursley shipped it out all over the country. Emerald



**Mike Swanson** (left), vice-president of growing operations, and **Stan Cruse**, president of Pursley Turf Grass.

was the next successful zoysiagrass. Sod farming became a large industry and Pursley grew with it. With successful endeavors into golf course construction, land development, and retail nurseries, Pursley Turf Grass also produces some of the best, certified sod in Florida.

Today Pursley Turf Grass grows Emerald, Argentine Bahia, four varieties of bermudagrass, two varieties of St. Augustine grass and centipedegrass. All except the centipedegrass are Florida state certified. This means, according to Mike Swanson, vice-president of growing operations, that they are grown under the auspices of the Div. of Plant Industry, Florida Dept. of Agriculture. Original planting material must come from an approved source, such as the University of Florida in Gainesville. The ground site must be approved and then fumigated. Each sprig is hand-planted in a foundation block. The rest of the sod fields are then planted by expanding out of that block.

The fields are constantly inspected by the Division of Plant Industry. Their inspections play an important part in the maintenance of Pursley Turf Grass sod. The Pursley acreage is divided into farms, numbered in the order of acquisition. Each farm is then divided into blocks, delineated by drainage/irrigation ditches. The blocks range in size from two and one-half acres up to 38 acres. Swanson treats each block as an individual entity, keeping a complete history of progress and treatment of each.

A soil sample is prepared from each block. According to Swanson, they generally indicate a need for lime. In addition to standard N-P-K tests, Swanson also keeps track of copper, calcium and magnesium. Some of the land has been used in the past for tomato production," says Swanson, "and we find real high copper readings." I've also run into problems such as where we ran a soil test on a block and it looked good. There was one area within the block, though, where centipedegrass just wouldn't grow. We went in and sampled just that one area and found a phosphorus level of 4. We had to redo about a half acre within

the block, made a correction for phosphorus deficiency and the grass filled in beautifully."

Weeds are a big headache in growing southern turf species. "Probably the biggest single problem here," indicates Swanson, "is nutsedge. We have both varieties, yellow and purple." Floratum St. Augustinegrass lends itself well to control of yellow nutsedge. The variety was developed through the University of Florida and Texas A&M (hence the name Flora-tam) because of its immunity to St. Augustinegrass decline virus (SADV).

In the process of testing for SADV, they also found a degree of resistance to chinchbugs. It is a little coarser than the Floratine variety and lacks just a slight degree of its blue green color, but has a much higher tolerance to the herbicide Atrazine. "We have found that we get better yellow nutsedge control by using an increased rate of Atrazine. The purple nutsedge is still a real headache for us, though," adds Swanson. Atrazine is also used extensively as a preemergent crabgrass treatment in St. Augustinegrass and in centipedegrass.

Swanson feels that he is getting good post emergence control of crabgrass in St. Augustinegrass with Asulox, a new product made by Rhodia. Post emergence treatment on bermudagrass is either MSMA or DSMA in conjunction with 2,4-D.

Even though the blocks are fumigated before planting, there are still weed problems. The sod farms are surrounded by farmland and weed seeds are carried in by the irrigation water, by birds and by the wind. Swanson has a full time roguing crew to see that the fields are kept perfectly clean. The crew members also carry flags and if they run into a particular type of weed that they don't want to take a chance on digging out, they flag it. Someone will then come through with a small sprayer and spot treat the area.

"Bermudagrass is one example," says Swanson. "If you get it in St. Augustinegrass, it is extremely difficult to mechanically remove with a roguing tool. If the person leaves just one little node, then he's wasted his

## Pursley Turf Grass

time. Torpedograss is another weed that is tough to get. We find roots 8-12 feet down when we dig irrigation ditches."

Swanson has had good luck with Roundup for problems like those. "Roundup suits a very specific purpose for us, as an in-field control of contamination. Of course, we might not get any grass out of the area where we've sprayed, but we don't inadvertently send weedy sod out." Often, because Roundup has hardly any residual effect, the grass will begin to fill back in.

The chemical itself is still expensive, about \$55-60 per gallon. At higher rates, it takes about five quarts to treat an acre. However, the price has decreased substantially from the original \$85 per gallon when Roundup was first introduced.

Broadleaf weeds are not much of a problem at Pursley Turf Grass. "We're constantly mowing," says Swanson. "Unless we get caught by the rain and can't get into the fields. The Atrazine is effective on broad-leaf weeds.

A full-time mechanic and assistant mechanic take care of almost a million dollars worth of equipment at Pursley. The inventory includes three Princeton harvesters originally \$29,000 apiece. A fourth, tractor-drawn harvester has been added. Thirteen John Deere tractors are maintained. A 60-hp model currently sells for about \$13,000.

"Because equipment costs are going sky high," laments Swanson, "we do all the preventative maintenance we can. We have even taken two or three of our older tractors and com-

pletely refurbished them in our shop, right down to a paint job and new seat. We're talking \$1500 versus \$12-13000 for a new one."

Much of the Pursley Turf Grass acreage is reclaimed bayheads. Often, in order to keep the land dry, a small lake has been dug to provide fill. The topsoil was pushed off and then spread back over the fill.

These ponds, and other natural ones, provide ideal irrigation sources. Drop a portable pump in a pond and turn the sprinklers on. A stationary system is used until the runners fill in enough to support traveling sprinklers. If necessary, water can even be pumped from pond to pond.

The ditches around each block serve a dual purpose. During heavy rains, they help carry water away. During the dry season, they become irrigation ditches.

Disease could be a problem, but doesn't go long unchecked. Gray leaf spot on St. Augustinegrass and dollar spot on bermudagrass are the most common, according to Swanson. "We also treat every block of grass we send out," adds Swanson, "whether it needs it or not. The critical factor in sod installation is that consumers get plenty of water on it. Even at this time of year, when we're getting plenty of rain, its extremely deceptive. You might get an inch of rain, then the sun comes out and it evaporates. Very little actually gets to the rootzone. Asking the consumer to keep it moist creates conditions for fungus. We want to see it get off to a good start."

The sod is harvested in 16-inch by 24-inch pieces, stacked 400 square feet to a pallet. Each pallet weighs approximately 3,500 pounds, depending upon moisture content, and weight restrictions generally limit a truck load to 16 pallets. All of the sod is cut to order. "That avoids having any grass around that's not 100 percent fresh," says Swanson. Pursley Turf Grass hasn't had to worry about having any old grass around for the last two years.

Because of the extra care and expense Pursley Turf Grass puts into their product, it naturally sells for a higher price. There is a good market, however, for quality sod and they've proved it. "One of the pleasant discoveries in this business," sums up Swanson, "is that people are willing to pay for quality." Ron Morris



**One of Pursley's** three Princeton harvesters in action (below). Roguing crews work near ditches used for drainage, irrigation and to separate fields.

