furled its terminal leaf bud. There was no frost damage of any kind on any of the

magnolias planted in the cold location.

I have proved to myself that Magnolia campbellii, contrary to other opinions, will survive and grow in our cold winter location. Our experiment plus the information received on climatic conditions in the areas of M. campbellii distribution convince me that M. campbellii can be grown in a more cold temperature zone than now thought possible.

I think the difficulty found trying to grow and have M. campbellii survive in the more cold areas of our country is that it has been treated as a shade tree and not a tree for shade. I am convinced that M. campbellii must be planted in a shaded location, possibly on a slope or in a raised bed but not in a frost pocket. A covering of the root zone by a rock scree or low plantings, rather than heavy winter mulching, would help protect the roots from freezing.

More work will now have to be done by courageous and interested gardeners

living in the very cold areas before any complete evaluation can be made.

## A Magnolia Forest

(excerpted from Merikaye Presley in "Dixie")

Louisiana, noted in the A.M.S. as having more members than any other Sunbelt state, is one of two states (the other is Mississippi) which have Magnolia grandiflora as their state tree or flower. A.M.S. member Frank P. Fischer of New Orleans, who started growing M. grandiflora seedlings in 1959 on a tract near Pearl River, the border between Louisiana and Mississippi, for a retirement project, recently has been selling his 20-foot to 40-foot specimen trees to landscape contractors in a several-state area. His "Magnolia Forest" was the subject of an illustrated feature by Merikaye Presley in the New Orleans Times-Picayune Sunday magazine, "Dixie," July 14, 1974. Some excerpts, by permission of editor Terence P. Smith:

"Fischer sells a 20-foot tree for between \$140 and \$200, depending on its quality and beauty. Overall symmetry, the size and color of the leaves, and the diameter of the trunk all go into determination of the price. The retail price is normally three times Fischer's price to the contractor, who bears shipping costs and the responsibility for the trees after they leave Magnolia Forest."

Fischer started with 3,000 seedlings in 1-gallon cans from an Alabama nursery, then soon began to raise his own trees from seed. "For the past few years [he] has been propagating his stock from carefully selected seeds, attempting to produce trees with large showy, dark green leaves. A native of Florida, he gathers many of his seeds from outstanding specimens he finds growing along Florida sand dunes . . . .

"Fischer said [seedling] magnolias are like people in that 'no two are exactly alike" . . . He pointed out differences in leaf and blossom characteristics among



M. virginiana australis, Jackson, Tenn.

his acres of trees. Leaves vary in the shade of green, can be curly or straight, and sometimes point up in clusters to form rosettes. The large flowers most often have nine petals, but can [go] up to 13 petals.

"Fischer gathers the seeds in September . . . and refrigerates them from six to eight weeks before planting them during February and March in flat trays. He covers the trays with screens to keep away rats and birds which would munch the seeds.

"After the seedlings have [attained] a few inches, Fischer moves them to onegallon cans. They are next transplanted to five-gallon cans, then eventually to 20gallon... The trees stay in the 20-gallon cans until they are about five years old and between 10 and 15 feet tall... He prefers to sell the larger trees, noting, 'The smaller they are the more competition we have.'

"The secret of success in moving 10- to 15-year-old trees up to 35 and 40 feet in height is to 'dig a big ball of dirt to go with them and move them at the right time,' according to Fischer. The trees are sold and shipped during the dormant, winter months when Fischer has two full-time workers to help him.

"A large circular trench, tapering inward, is dug around the tree to be moved [from field], and the root ball is encircled with hog wire and fastened to a metal plate which is slipped under the mass of earth. The tree is tugged out of the trench with a jeep and pulled to the loading dock."

There, "Fischer... watches the trees for several days to make sure they survive the shock of being uprooted. He says he rarely loses a tree, but if one is not going to live, it becomes apparent within just a few days. 'If the leaves turn a sickly yellowish green and don't shake off, then the tree is dying' he said..."