or other mastic is applied soon after the grafting is done. Plastic tapes also can be used, but take more time.

One should check once or twice during the first summer to pull off shoots that arise from latent or adventitious buds from the stock frame. A young apple or pear or crabapple tree, of three to five cm. caliper, would accommodate from 20 to 40 scions, whereas we have often placed 1100 or 1200 on large trees. The return to flowering is very quick and one can expect a reasonable bloom the year after the grafting is done.

In Search of Magnolias New Jersey to Florida

by RICHARD B. FIGLAR



M. virginiana at Glen Rock, N.J.

On our vacation trip to south Florida during late November 1976, my wife and I had the opportunity to observe both *Magnolia grandiflora* and *M. virginiana* in the wild as well as the cultivated state. Since we made most of our observations while traveling along the interstate roads, we learned a great deal about the relative geographic abundance of these two Magnolia species as well as the trees most commonly associated with them.

Southbound

From our starting point in northern Jersey our trip took us south on I-95 to Petersburg, Virginia. From Petersburg we traveled I-85 to our first stop, Atlanta, Georgia. After a brief stay in Atlanta we cruised south on I-75 to Tampa, Florida. At that point we left the interstate roads and proceeded east on State Highway 60 to Lake Wales, Florida, then south on U.S. 27. This eventually brought us into the Miami area.

Our first noticeable encounter with wild Magnolias along these routes was on I-85 just south of Petersburg, Va. These *M. virginiana* were quite abundant especially in the many valleys and glens along the road. Although mostly shrubby, some tree swere over 20 feet tall. A few trees still had green leaves. However, most had chocolate-brown leaves and were in the process of defoliating for the winter. Sweetgum (*Liquidambar styraciflua*) and the American Holly were the most common associates, the Holly being exceptionally beautiful here. Soon after we crossed the North Carolina state line, the *M. virginiana* vanished. Although Sweetbay is indicated to be native throughout our route through the Carolinas, it apparently is not abundant enough to be detected by highway observation along I-85.

Our next encounter with M. virginiana coincided with the first sighting of wild M. grandiflora. This occurred in the vicinity of Cordele, Georgia, along I-75. We first noticed the M. grandiflora. For one who has only seen this tree in cultivation, the sight of it growing wild in the woods is a fantastic experience, especially during this time of year when most deciduous trees have lost their



Georgia's biggest Magnolia.

leaves. Most of the specimens were quite tall, 40 to 80 feet, and generally lacked the spreading habit and symmetry common of open grown trees.

After getting over the initial shock of seeing the M. grandiflora, we began to notice Sweetbay growing side by side the M. grandiflora. Its habit was quite similar to its cousin (e.g. tall though somewhat less dense) and except for occasional yellowing leaves it was quite evergreen.

In fact, we sometimes had difficulty discerning a robust Sweetbay from the *M. grandiflora*. Later, however, a strong breeze developed giving away the silvery signature of the Sweetbay's underleaf.

Georgia's Largest Magnolia

As we neared Tifton, Georgia, we decided to look for the reputed largest Magnolia in Georgia (Ref. Georgia's Largest (?) Magnolia, M.C. Collins, Newsletter of the American Magnolia Society, April 1970, p. 6). After many telephone calls by a helpful local hotel manager, we finally got instructions on where to locate this giant tree. Despite the directions we still had great difficulty finding it. At last, after one more inquiry at a small filling station, we were finally able to locate it. It was about $\frac{1}{2}$ mile off U.S. 41 (which runs more or less parallel to I-75) in the middle of a cotton field! From the distance it looked more like a large live oak. However, as we got closer (along a winding dirt road) it became very apparent that this was indeed a huge Magnolia grandiflora. With 1970 dimensions of trunk 15 feet 11 inches in circumference, 65 feet tall, and a branch stread of 78 feet, this great tree now sports a spread of over 85 feet! Because of its marked tendency to spread, many (if not most) outside branches have taken root. In fact, these large descending branches that attach themselves to the ground act as natural structural supports for this gigantic tree.

From the standpoint of specific characteristics, this *M. grandiflora* appeared to be of denser habit than most with medium dark green leaves which are slightly smaller and somewhat narrower than typical *M. grandiflora* (more appropriately: leaves narrow elliptic, cuneate at base, acuminate at apex). The leaf undersides are clothed with light to moderate gray-brown indumentum.

It seems likely that this *M. grandiflora* is a pre-War Between the States plantation tree and I would be interested in knowing more about its history.

M. Grandiflora in Florida

As we continued south on I-75 through the central part of northwestern Florida, M. grandiflora generally became larger and more abundant. In some areas, particularly near the junction of I-75 and Florida's Turnpike (just south of Ocala, Florida) it was the tallest tree of the forest. Nowhere, however, did it tend to form pure stands. In northern Florida its most common associate was mainly the Baldcypress. Almost every Baldcypress hammock contained M. grandiflora and a few M. virginiana. Although M. virginiana was pretty much confined to the cypress swamps, M. grandiflora was also common in many upland areas as well. In these higher areas M. grandiflora was most often associated with Sweetgum. As we approached the Tampa area, wild M. grandiflora vanished and was never seen subsequently (although I thought I saw one or two along Florida Route 60 which is indicated to be in the natural range of M. grandiflora).



Everglades Sweetbay (22 November)

Groves of Sweetbay

As we continued further south, leaving the indigenous *M. grandiflora* behind, we were then able to devote our attention to *M. virginiana* which remained abundant along the roadside. Once in a while a blossom or two could be spotted along with an occasional red seed cone. Near the junction of State Road 60 and U.S. 27 (the Lake Wales area), *M. virginiana* became so common that it often formed pure dense stands (hammocks and bayheads) of up to a mile or so in diameter! We had no idea that this species could be so abundant. Some of the smaller *M. virginiana* bayheads are themselves quite interesting; the largest trees are in the center with successively smaller trees radiating out in all directions ultimately leaving small stunted trees (or seedlings) along the circumference. It was most interesting to observe this (bayhead) phenomenon in Magnolias when it is most often exhibited by stands of Baldcypress (cypress heads).

Sweetbay continued to be an abundant constituent well into the Lake Okeechobee area of south-central Florida. Thereafter Florida agriculture began to dominate the scenery.

The Search for the Southernmost Magnolia

Most literature on M. virginiana indicates that Sweetbay ranges south into the Everglades. Some authors occasionally refer to this southernmost point as "the Everglade Keys" — or is it possible that they are actually referring to the Florida Keys which in most cases are farther south than the Everglades? Whatever, to date I have not known of any conclusive description of M. virginiana being native to the Florida Keys. (Author's note: I would be interested