SHIPMENTS OF FLORIDA ORNAMENTALS TO THE U.S. AND CANADA

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Abstract. The Florida Department of Agriculture and Consumer Services records information about ornamentals truck shipments out of the Florida Peninsula. Using data from 1981, 1984, and 2000/1, changes over the twenty year period are analyzed. While the seasonal pattern of shipments was similar in the 1980s and 2000/1, the percent of all shipments to states in the southern half of the nation has increased. Accounting for over half of all shipments, 'Foliage' remains the most important plant category. However, 'Landscape Plants' has tripled its share and, at 21%, is on a par with Ferns. As would be expected, the mix of ornamentals varies across destination regions. Ferns tend to be more important in more northern regions. Landscape Plants are the third most important plant type in all regions, save for Southeast and South Plains where they are number two.

The distribution of interstate shipments of Florida ornamentals in 200/1 is examined and compared with that during the 1980s. Such information can be of value for producers.

Fig. 1. Destination Regions for Florida Ornamentals.

Fig. 2: Distribution of Ornamentals Shipments from Florida by Destination Region, 1981 and 2000/1

Fig. 2. Distribution of ornamentals shipment from Florida by destination region.
Materials and Methods

The Florida Department of Agriculture and Consumer Services (FDACS) maintains inspection stations along all roads linking the Florida Peninsula with the rest of the nation. The data are from information collected from 13,731 trucks as they exited the Florida Peninsula by Florida State Agricultural Inspectors for the 12 month period beginning September 1, 2000\(^2\). These will be compared with results using similar data for the 1981 or 1984 calendar years\(^3\) (Strain and Beilock, 1982; Rahmani et al., 1987). It should be stressed that the data does not include deliveries of Florida ornamentals to destinations south of the St. Marys and Suwannee Rivers. In addition, shipments from Florida by modes other than trucks are not included, though these are believed to be negligible. Information collected includes the carrier name, vehicle size, load type, origin, number of drops, and final destination.

The FDACS data is intended to be a complete census of all ornamentals truck shipments from the Florida peninsula. In the early and mid-1980s, this was effectively the case. However, over the intervening years, budgetary limitations on staffing, traffic growth, and additional duties for inspectors have made it impossible for there to be universal coverage. More recent data should be viewed as being very large samplings of the total population. As there are no reasons for suspecting bias with regard to any characteristics of the population, data can be treated as being random or, at least, representative samplings. Because of this evolution from census to sampling, emphasis in this study will be on distributions of shipments, origins, etc., rather than absolute amounts.

Results and Discussion

Destinations. For the purpose of describing the distribution of destinations ornamentals shipped from the Florida peninsula, seven destination regions within the U.S. were defined by the authors (Fig. 1). Canada was treated as a separate destination region. As might be expected, the Southeast is Florida’s most important destination region, accounting for 35% of all outshipments in 1981 and just under 50% in 2000/
The increased importance of the Southeast in 2000/1 relative to 1981 appears to be part of a general trend for Florida ornamentals deliveries to become more concentrated in the southern part of the nation. In 1981, 53% of all shipments were to the three southernmost regions (i.e., Southeast, South Plains and Far West). By 2000/1, these regions accounted for 70% of all Florida shipments.

Another way of examining the distribution of deliveries is by state. Deliveries of Florida’s ornamentals outside of the Florida peninsula are highly concentrated. Six states accounted for nearly half of all deliveries by volume in 2000/1, 10 for just under two thirds, and 15 states for nearly 80% (Fig. 3). Reflecting the concentration of deliveries in the southern half of the nation, only one of the top six destination states, three of the top ten destination states, and six of the top fifteen destination states were in the northern part of the U.S.

For the purpose of describing the distribution of origins for ornamentals shipments from the Florida Peninsula, the State was divided into three regions (Fig. 4). The Southern region contained the counties of Sarasota, De Soto, Hardee, Highlands, Okeechobee, Indian River and all counties south of these. The Central region included all counties north of the Southern region but south of Levy, Alachua, Clay, and St. Johns counties. The Northern region was comprised of all counties north of the Central region. Ninety-four percent of the shipments originating in the Northern region in 2000/1 came from counties east of the Suwannee River and south of the St. Marys River (this line indicated on Fig. 4 by the dotted line). The remaining 6% originated in the Panhandle, traveled eastward across the Suwannee River, and then passed through an Inspection Station on their way northward out of Florida.

It should be stressed that ‘origin’ refers to where the truck which would make the long haul movement was loaded and not, necessarily, where the ornamentals were grown. However, it is likely that in a very large proportion of cases, the region of origin for the long haul truck also was the location of the nursery. If true, since the mid-1980s, it appears that the importance of production in the Southern region has declined relative to the other regions (Fig. 5). Reasons for this shift are beyond the scope of this paper.

Data collected for both 1984 and 2000/1 show that monthly shipment volumes of ornamentals from Florida tended to be greater in the first half of the year (Fig. 6). In both periods, shipments were at their highest in April or May, with a smaller peak in September. The reasons are not known for the greater variability in month-to-month shipment volumes in 2000/1 compared to 1984.

When identifying ornamentals, FDACS inspectors use five categories: Foliage, Ferns, Landscape, Bedding Plants, and Potted Plants. The last two categories are of minor importance, each accounted for 3% or less of total shipment volume in 2000/1.

In terms of volume, Foliage is by far the most important ornamentals type shipped from the Florida Peninsula. In 1984, Foliage accounted for just under 70% of all shipments. In 2000/1, with a 54% share of all shipments, Foliage still dominated, though to a lesser extent. Virtually all of the share lost by Foliage was gained by Landscape Plants, which went from a 7% share of all 1984 shipments to nearly 21% in 2000/1. The share of the other major category, Ferns, remained virtually unchanged at 20 to 21% for both 1984 and 2000/1.

In 1981, Ferns and Foliage were combined into one category. For that reason, comparisons will be with 1984.
Fig. 6. Distribution of Ornamentals shipments from Florida by month.

Fig. 7. Distribution of Ornamentals shipments from Florida by type.
Figure 8: Distribution of Ornamentals Shipments from Origin Regions by Type, 2000/1

Fig. 8. Distribution of Ornamentals shipments from origin regions by type.

Figure 9: Ornamentals Shipments from Origin Regions in Florida by Type, 2000/1

Fig. 9. Ornamentals shipments from origin regions in Florida by type.
There were considerable differences across the origin regions with regard to plant types (Fig. 8). In 2000/1, over a quarter of shipments by volume from the Central region were Ferns, versus less than 10% in each of the other regions. Fifty-seven percent of shipments from the Northern region were Landscape Plants, nearly four times the percentage from the other regions. Finally, with nearly three quarters of its shipments, Foliage production was emphasized most in the Southern region (52 and 35%, respectively, of shipments from the Central and Northern regions).

Sixty percent of all shipments, by volume, originated in 2000/1 in the Central region. That region also was the origin for the largest single share of each plant type (Fig. 9). But reflecting the above-described differences within each region, the distribution of shipment origins by plant type varies considerably. The Central region totally dominated Ferns, with nearly 90% of all Florida’s shipments originating in that region. In contrast, the Central region accounts for barely half of all shipments of Landscape Plants, with the Northern and Southern regions accounting for 30 and 20%, respectively. Fifty-seven percent of Foliage shipments are from the Central region, with the Southern region accounts for most of the remainder (37% of all Foliage shipments).

As might be expected, the mix of ornamentals varied across destination regions. In 2000/1, Foliage accounted for over half of all deliveries by volume in every region (Fig. 10). Ferns tended to be most important in more northern regions, such as the Northeast, Lake States and North Plains. Landscape Plants were most important in two southern regions, Southeast and South Plains, where they are account for larger shares of all deliveries than Ferns.

Summary

In this paper, the pattern of ornamentals shipments from the Florida peninsula for the year beginning September 1, 2000 has been examined with respect to seasonal variations, origins and destinations, and plant types. Comparisons of these data with corresponding information from the early 1980s suggest some trends in the industry. While the seasonal pattern of shipments was similar in the 1980s and 2000/1, the percent of all shipments to states in the southern half of the nation has increased. Accounting for over half of all shipments, Foliage remains the most important plant category. However, Landscape Plants has tripled its share and, at 21%, is on a par with Ferns. As would be expected, the mix of ornamentals varies across destination regions. Ferns tend to be more important in more northern regions. Landscape Plants are the third most important plant type in all regions, save for Southeast and South Plains where they are number two.

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