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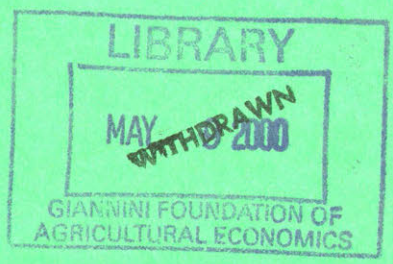
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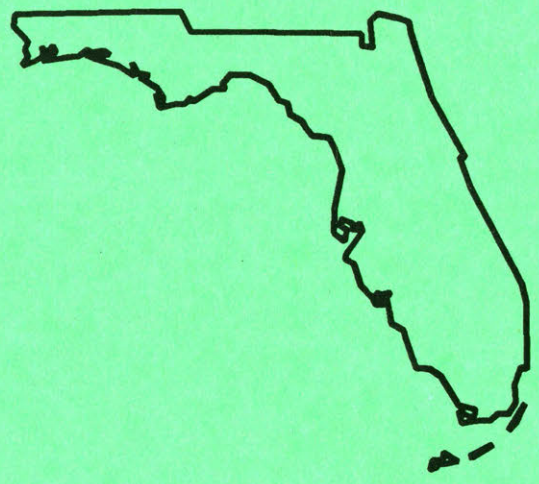
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Alan W. Hodges  
Loretta N. Satterthwaite  
John J. Haydu

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# Analysis of Cut Foliage Businesses In Florida, 1997



**UNIVERSITY OF  
FLORIDA**

Institute of Food and Agricultural Sciences  
Food and Resource Economics Department  
Florida Agricultural Experiment Stations  
Florida Cooperative Extension Service  
Gainesville, FL 32611

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# ANALYSIS OF CUT FOLIAGE BUSINESSES IN FLORIDA, 1997

Alan W. Hodges, Loretta N. Satterthwaite and John J. Haydu  
University of Florida, Institute of Food & Agricultural Sciences  
Food & Resource Economics Department, Gainesville, FL  
and Mid-Florida Research and Education Center, Apopka, FL  
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## ABSTRACT

Information is presented on sales, production, costs, assets and liabilities, and efficiency indicators for 12 cut foliage businesses in Florida for the year of 1997, and changes in business performance from the previous year. The average firm had annual sales of \$902 thousand (K), used 45 acres of production area, employed 23 full-time equivalent (FTE) persons, and managed \$1.158 million (M) in owned and leased capital. Value produced per acre of growing area averaged \$15.3K. Total sales per FTE person averaged \$38.9K. Total capital managed per FTE and per acre of growing space averaged \$50.0K and \$25.8K, respectively. Managed capital turnover averaged 0.78. Total costs averaged \$892K and total costs per acre of production area averaged \$14.4K. As a share of total sales, expenses averaged 41 percent for employee labor, 13 percent for materials, 18 percent for finished products brokered, 3 percent for equipment/facilities, 12 percent for administrative overhead, 7 percent for capital, and 5 percent for management/owners. Net income, including owner/management compensation, averaged \$166K and net profit margin averaged 16 percent. Rate of return on assets and rate of return on net worth were 18.8 and 34.7 percent, respectively. Overall business profitability was markedly improved in 1997 over the previous year for the same firms sampled. Similar information is presented for large-, medium-, and small-sized firms, as well as highly profitable firms.

**KEY WORDS:** cut foliage, fernery, ornamental plant products, business analysis, sales, costs, returns, efficiency, Florida.

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# ANALYSIS OF CUT FOLIAGE BUSINESSES IN FLORIDA, 1997

Alan W. Hodges<sup>1</sup>, Loretta N. Satterthwaite<sup>2</sup>  
and John J. Haydu

## INTRODUCTION

### The Cut Foliage Industry

The state of Florida is the largest producer of cultivated ornamental cut foliage products in the U.S. with total farmgate sales in 1997 of \$86 million from 130 wholesale producers and 7,382 acres in production (NASS, 1998). Leatherleaf fern (*Rumohra adiantiformis*) is the most important cut foliage product in Florida, accounting for 69 percent of all cut foliage sales and 63 percent of production area. Other cut foliage crops produced in Florida, include several species of ornamental asparagus (*Asparagus* spp.), Japanese pittosporum (*Pittosporum tobira*), English ivy (*Hedera helix*) and aspidistra (*Aspidistra elatior*) (Stamps and Conover, 1986). Sales of cut foliage by growers in Florida and other states over the period 1985–97 are shown in Figure 1. The cut foliage industry in Florida grew rapidly during the 1970s and early 1980s, then slowed in the latter 1980s and 1990s (NASS, 1999). Sales were down sharply in 1997 from the previous year.

### The University of Florida Business Analysis Program

Information in this report was collected as part of the University of Florida's ongoing *Business Analysis and Planning Program* for the state's horticultural industries (Hodges *et al.*, 1997). Since the 1960s, this program has gathered and analyzed confidential production and accounting records from wholesale nurseries in Florida to compile industry average financial

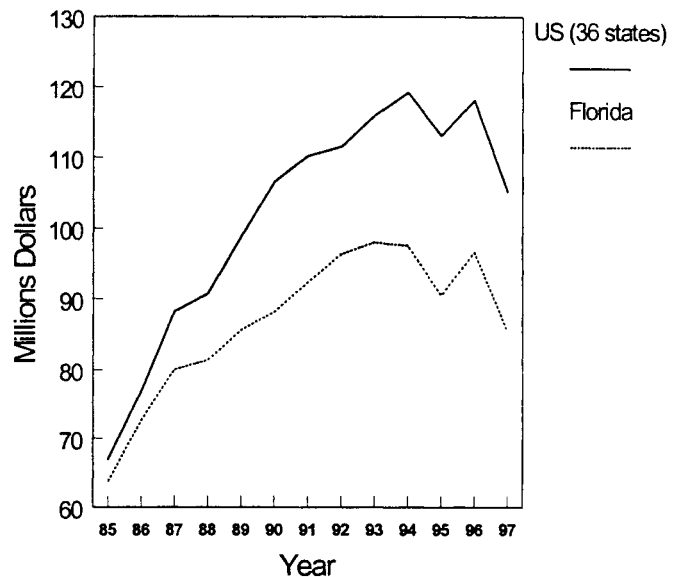


Figure 1. Cut foliage sales for Florida and the United States, 1985–97.

performance benchmarks. In 1996, the *Business Analysis Program* included the cut foliage industry for the first time (Hodges *et al.*, 1998). This report presents results for a second year (1997).

## PROCEDURES

**Sample of Firms and Industry Groups Analyzed.** Information for this report was collected from twelve (12) wholesale cut foliage grower firms in Florida for the 1997 fiscal year. Firms were located in Volusia, Lake and Putnam counties. The firms participated in the program on a voluntary basis and in exchange received a report with information similar to that presented in this paper. The sample of businesses analyzed in this report is believed to represent firms with above-average management quality, by virtue of their willingness to participate in quality improvement programs such as this. Records were compiled and analyzed separately for three different groups of firms based upon total annual sales: large firms had sales of \$1 million or greater; medium firms had sales of \$500 to \$999 thousand; small firms had sales of less than \$500 thousand. Results for a subgroup of seven firms with rates of return on net worth of at least 30 percent were also analyzed and reported separately as "highly profitable" firms.

<sup>1</sup> Coordinator of Economic Analysis, University of Florida, Food & Resource Economics Department, PO Box 110240, Gainesville FL 32611, tel 352-392-1881 x312, fax 352-392-3646, email hodges@fred.ifas.ufl.edu.

<sup>2</sup> Senior Statistician and Extension Economist, respectively, University of Florida, Mid-Florida Research and Education Center, Apopka, FL.

**Information Collected and Reported.** Data gathered from participating firms included monthly sales, other income, expenses itemized in 26 categories, assets and liabilities, inventory values, value of leased property, production area, and labor hours or number of full-time persons employed. Information was gathered through personal interviews with management, from company financial statements, income tax forms, and other production records. Data was transcribed to standard worksheet forms (see Appendix) and entered into computer spreadsheets for analysis. Results were calculated as weighted averages for firms in each group, so larger firms had greater influence on the results by virtue of their greater production or financial values.

### **Accounting and Measurement**

**Conventions.** A number of accounting conventions were adopted for this analysis in order to standardize the collection of information from different firms. Because most of these firms operate under a cash-based accounting system, sales and expenses reflect collections and disbursements made during the period, respectively. Sales of finished products purchased brokered for other firms were deducted from total sales to yield own-product sales. All assets and liabilities were evaluated to represent a mid-year position by averaging the beginning and ending values for the period (Jan. 1 to Dec. 31). Investments in buildings, site improvements, machinery and equipment were taken at book value, i.e. original cost less accumulated depreciation. Leased capital assets in land, buildings, and equipment were estimated at current market value. Investments in land were generally valued at the original purchase price, rather than the current appreciated values. Depreciation expenses on fixed assets were taken from company depreciation schedules, which were computed according to the IRS Accelerated Cost Recovery System (ACRS) method (3, 5, or 7 years) for equipment, and straight-line or double declining balance methods (10 to 20 years) for buildings and improvements. Product inventories were accounted for on an accrual basis, where changes in inventory values were added to sales to calculate total value of production and total income. Inventories were also included among owned capital investments. In addition

to book values or computed field values for inventories, plant inventories included an additional 25 percent of annual sales to adjust for the value of the established crop beds, which take 9 months to 1 year to begin producing and 2 to 3 years to reach full production. In cases where assets were personally owned by corporate officers and leased exclusively to the company, these assets were taken at book value rather than market value, and debts to corporate officers were not included among company liabilities when there was no intention to repay these debts. In some cases, lease payments for land were taken as compensation for management. For firms that did not have current records available on their growing area, the net usable growing space was estimated at 70 percent of the overall production area.

## **RESULTS**

### **Income and Value Produced**

**Annual Sales.** Total annual sales averaged \$902 thousand (K) for all firms and ranged from \$2.11 million (M) for large firms to \$296K for small firms as shown in Table 1. Sales of own products grown by firms averaged \$670K or 74% of total sales, while sales of finished products purchased for immediate resale ("brokered") were \$233K. Highly profitable firms and medium firms had a slightly higher percentage of brokered sales.

**Plant Inventory Change and Total Value Produced.** Changes in plant inventory values during 1997 (Jan. 1 to Dec. 31) were positive for the overall industry average at \$17K, and increased \$108K for large firms, but decreased for all other groups. Total value produced, a measure of productive effort calculated as the sum of own plant sales and change in plant inventory value, averaged \$687K for all firms and ranged from \$1.68M for large firms to \$219K for small firms.

**Table 1.** Income and value produced for Florida cut foliage businesses, 1997.

Income/Value measure	All firms	Large firms	Medium firms	Small firms	Highly profitable firms
<i>thousands dollars</i>					
Own produced product sales	670	1,567	544	232	586
Brokered product sales	233	538	213	65	289
Total annual sales	902	2,106	757	296	875
Change in plant inventory value	17	108	(12)	(13)	(5)
Total value of production	687	1,675	531	219	581
Total income	1,013	2,387	854	317	973

**Total Income.** Total income was the sum of plant sales, changes in plant inventory values, and miscellaneous income from interest on accounts, rents, and other charges. It averaged \$1.01M for all firms and ranged from \$2.39M for large firms to \$317K for small firms.

**Monthly Sales.** The distribution of monthly sales is shown in Figure 2. Sales were highest during the months of January through April, followed by declining summertime sales, then a smaller second peak in October. Large firms had markedly greater seasonal sales. Presumably the seasonal pattern of sales is related to the market for holiday floral crops during this period.

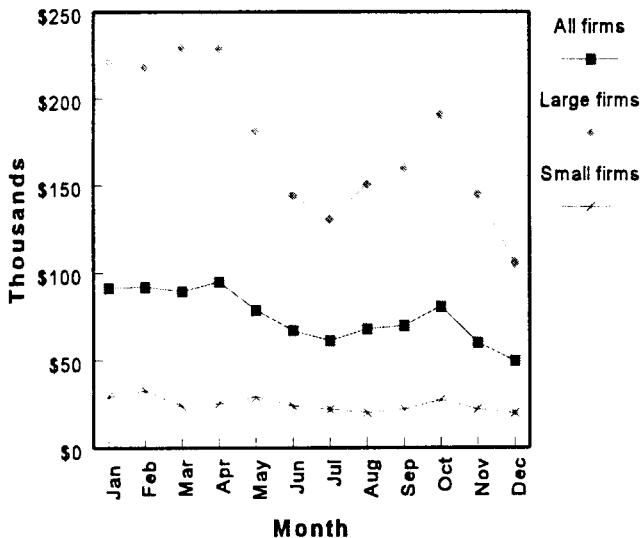


Figure 2. Average monthly sales per firm for Florida cut foliage businesses, 1997.

**Resources Used**

Productive resources of land, labor and capital used by the cut foliage industry are

summarized in Table 2. Land and capital used represent averages of beginning and ending values for the year.

**Land.** The total farm area of surveyed cut foliage growers averaged 123 acres. The net usable area for production of cut foliage averaged 45 acres for all firms and ranged from 84 acres for large firms to 21 acres for small firms. These figures represent growing beds and fields only; area for aisles, driveways and other service areas were excluded.

**Labor.** Labor resources used were measured in terms of full-time equivalent (FTE) persons employed—including production, administrative, sales, and management personnel. In most cases, this was calculated by dividing total labor hours by 2,080 hours per worker-year (52 weeks at 40 hours per week). The number of full-time equivalent persons employed averaged 23 for all firms and ranged from 58 for large firms to 10 for small firms.

**Capital Managed.** Both equity and debt capital, leased assets in land, buildings and equipment, and working capital represented capital resources used for operations. Owned capital in buildings, improvements and equipment were assessed at book value, while leased assets were taken at market value. Total capital managed averaged \$1.16M for all firms and ranged from \$2.27M for large firms to \$605K for small firms. As a share of total managed capital, land represented the largest component at 42 percent, followed by growing plants in inventory at 30 percent, buildings/installations at 12 percent and other working capital (supply inventory, accounts receivable, cash on hand) at 12 percent.

**Table 2.** Productive resources used by Florida cut foliage businesses, 1997.

Resource	All firms	Large firms	Medium firms	Small firms	Highly profitable firms
Total farm area (acres)	123	214	116	73	95
Net usable production area* (acres)	45.0	83.8	45.7	21.1	37.7
Number persons employed (FTE**)	23.2	57.8	14.4	9.5	21.8
Total owned capital (1000\$)	883	1,732	695	524	760
Capital leased (1000\$)	275	537	321	81	217
Total capital managed*** (1000\$)	1,158	2,269	1,016	605	977

\* Net usable production area excludes roads within fernery.

\*\* Full-time equivalent person represents 2,080 hours per year.

\*\*\* Capital managed is capital owned, both equity and debt capital, plus capital leased.

### Productivity, Efficiency and Intensity Indicators

**Value Produced per Acre.** The productivity of cut foliage operation space was measured by the value of production (annual sales of own product plus inventory change) per acre of growing space. Value produced per acre averaged \$15.3K per acre and ranged from \$20.0K for large firms to \$10.4K for small firms (Table 3). Highly profitable firms produced an intermediate value of \$15.4K per acre, demonstrating that high values of this indicator are not necessary for profitable operations. Space productivity is affected by production area layout and space utilization efficiency (renovation), plant growth rates and survival, and inventory turnover.

**Value Produced per Worker.** Labor productivity was measured in terms of sales and value produced per full-time equivalent (FTE) worker, i.e. per 2,080 labor hours. For all firms, value of production averaged \$29.6K per FTE, or \$14.25 per hour worked. This value was \$29.0K per FTE for large firms, \$36.9K for medium-sized firms, and \$23.2K for small firms. Variations in labor productivity may result from differences in investment for labor-saving equipment, labor management practices, and practices affecting crop turnover.

**Capital Managed per Acre.** The intensity of capital use in relation to production space was measured as the ratio of capital managed to growing area (acres). Capital managed per acre of growing area averaged \$25.8K for all

firms and was \$27.1K for large firms, \$22.3K for medium-sized firms, and \$28.6K for small firms. Capital managed per acre for highly profitable firms was close to the average.

**Capital Managed per Worker.** The intensity of capital use in relation to labor was measured as the ratio of managed capital (owned plus leased) to number of persons employed. This measure averaged \$50.0K per FTE for all firms and was \$39.3K for large firms, \$70.6K for medium-sized firms, and \$64.0K for small firms. The substantially lower capital-labor intensity for large firms may reflect economies of scale in cut foliage production, i.e. the greater efficiencies of resource use that can be realized for larger-sized operations through specialization of tasks and better utilization of technology.

**Growing Area Managed per Worker.** The intensity of labor use was evaluated in terms of production area (acres) per FTE person. Growing space per FTE averaged 1.94 acres for all firms and was 1.45 acres for large firms, 3.17 acres for medium firms, and 2.24 acres for small firms.

**Managed Capital Turnover.** This indicator expresses the ratio of annual sales to total managed capital. Managed capital turnover averaged 0.78 for all firms and ranged from 0.93 for large firms to 0.49 for small firms. In general, high capital turnover is desirable because it indicates greater sales per dollar of investment. Low turnover rates may result from low labor, or space, productivity or excessive capital investment.



**Table 3.** Resource productivity, efficiency and use intensity indicators for Florida cut foliage businesses, 1997.

Indicator	All firms	Large firms	Medium firms	Small firms	Highly profitable firms
Value of production per acre production area (1000\$)	15.3	20.0	11.6	10.4	15.4
Value of production per person (1000\$/FTE)	29.6	29.0	36.9	23.2	26.7
Total sales per persons employed (1000\$/FTE)	38.9	36.5	52.5	31.4	40.2
Sales own plants per person (1000\$/FTE)	28.9	27.1	37.7	24.5	26.9
Production area per person (acres/FTE)	1.94	1.45	3.17	2.24	1.73
Persons employed per acre (FTEs)	0.52	0.69	0.32	0.45	0.58
Capital managed per acre (1000\$)	25.8	27.1	22.3	28.6	25.9
Capital managed per person (1000\$/FTE)	50.0	39.3	70.6	64.0	44.9
Managed capital turnover	0.78	0.93	0.74	0.49	0.90

### Expenses and Cost Efficiency

Operating expenses were grouped into the following categories: employee wages and benefits, materials, finished products purchased for resale, facility and equipment, administrative overhead, capital, and management/owner compensation. The first three expense categories were considered direct production costs, while the other categories were considered indirect expenses. Expenses for income taxes or debt principal payments were not included. Costs are itemized in Table 4 and summarized by major category in Figure 3.

**Employee Expenses** included wages, salaries, sales commissions, payroll taxes (social security), workers' compensation insurance, health insurance, bonuses and other benefits paid. This was by far the largest expense category, averaging \$368K for all firms and ranging from \$889K for large firms to \$136K for small firms. Employee expenses represented 41 percent of total costs.

**Materials Expenses** included plants and seeds, fuel for cold protection, fertilizer and lime, chemicals, packing and shipping materials, and other production supplies such as tags and small tools. These items are "direct" expenses or "cost of goods sold". Expenses for materials averaged \$117K for all firms and ranged from \$297K for large firms to \$33K for small firms. These expenses represented 13 percent of total costs. Expenses for chemicals, including herbicides,

fungicides and insecticides and dips, averaged \$43K or 5 percent of total expenses.

**Finished Product Purchases** were for brokered plant products. Most firms in the cut foliage industry do some brokerage business. Expenses for brokered product averaged \$162K, and ranged from \$411K for large firms to \$37K for small firms. These expenses were 18 percent of total costs.

**Facility and Equipment Expenses** included repairs and maintenance for production and packing facilities and equipment operating costs such as fuel and lubrication. Expenses averaged \$30K for all firms and ranged from \$62K for large firms to \$15K for small firms. These expenses represented 3 percent of total costs.

**Administrative Overhead Expenses** included travel and entertainment, property insurance, telephone, electric power, advertising, property taxes and business licenses, rent and other cash expenses such as professional services, trade association memberships, office expenses and miscellaneous. Expenses averaged \$105K for all firms and ranged from \$242K for large firms to \$31K for small firms, and represented 12 percent of total costs.

**Capital Costs** included interest on borrowed capital in the form of mortgages, promissory notes and charge accounts, and depreciation on fixed assets. Total capital costs averaged \$66K for all firms and ranged from \$149K for large firms to \$39K for small firms,

representing 7 percent of total costs. Depreciation expenses averaged \$37K for all firms.

### Management/Owner Compensation

represented salaries and benefits paid to owners and top management. These expenses averaged \$45K for all firms and ranged from \$82K for large firms to \$25K for small firms, representing 5 percent of total costs.

**Total Costs** for all items averaged \$892K for all firms and ranged from \$2.13M for large firms to \$318K for small firms.

**Cost as a Share of Sales.** Analysis of expenses in relation to sales is one of the most reliable measures of cost efficiency in many industries. For all firms, costs as a percentage of sales averaged 40.8% for employee labor, 13.0% for materials, 17.9% for finished products brokered, 3.3% for facility and equipment, 11.6% for overhead, 7.3% for capital and 4.9% for management. Highly profitable firms generally had lower costs per unit sales for labor, materials, overhead and capital, but their costs were not below-average for brokered plants, facility/equipment, or management.

**Cost per Acre.** The cost per unit of growing space is a useful measure for comparing cost efficiencies. Total costs per acre of growing area, excluding brokered plants, averaged \$16.2K for all firms and was \$20.5K for large firms, \$12.1K for medium firms, and \$13.3K for small firms (Table 5). Highly profitable firms had costs per acre (\$15.9K) somewhat lower than all firms.

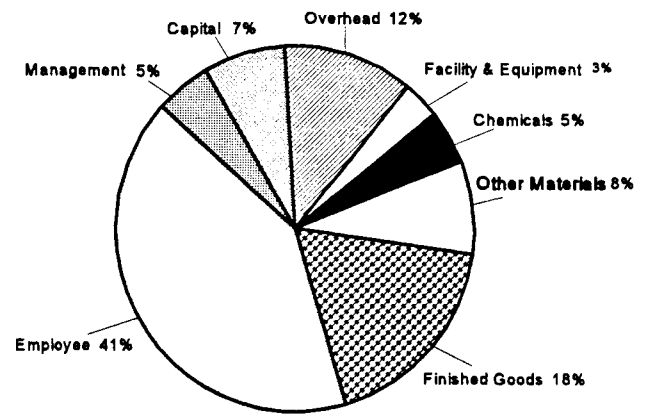


Figure 3. Distribution of expenses for Florida cut foliage businesses, 1997.

**Table 4.** Operating expenses for Florida cut foliage businesses, 1997.

Expense Item		All Firms	Large Firms	Medium firms	Small Firms	Highly Profitable Firms
Employees	Salaries and wages	321,072	776,017	233,906	117,836	279,605
	Taxes and benefits	46,977	112,942	33,116	18,486	40,340
	Sub-total	368,048	888,959	267,023	136,322	319,945
Materials	Plants & seeds	655	1,557	798	0	884
	Heating fuel	4,131	8,150	4,421	1,488	3,906
	Fertilizers & lime	15,534	28,490	15,487	7,798	12,432
	Packaging supplies	47,640	117,439	38,594	12,998	43,158
	Other production supplies	6,546	14,360	7,160	1,367	4,682
	Herbicides	4,786	13,614	2,482	1,333	4,229
	Fungicides	18,418	54,538	8,463	4,693	14,899
	Insecticides	12,077	36,972	5,609	2,313	8,945
	Nematicides	3,466	10,377	1,940	541	2,668
	Other chemicals	3,892	11,006	2,277	917	3,942
	Sub-total chemicals	42,639	126,506	20,791	9,797	34,682
Sub-total all materials	117,145	296,502	87,251	33,447	99,745	
Finished Product Purchased for Resale		161,719	410,878	131,207	36,634	202,363
Direct Costs Total		646,912	1,596,339	485,480	206,403	622,053
Facility & Equipment	Facility repairs & maint.	14,528	30,493	13,056	6,126	13,569
	Equipment operation	15,417	31,241	11,260	9,249	10,247
	Sub-total	29,945	61,734	24,316	15,375	23,815
Overhead	Travel	3,393	10,287	1,558	723	2,101
	Insurance	7,417	15,847	6,725	2,913	5,187
	Telephone	7,661	13,264	8,272	3,811	5,800
	Electricity	8,608	18,000	7,911	3,530	6,472
	Taxes & licenses	8,287	13,162	7,764	5,779	7,814
	Advertising	2,798	6,008	2,723	931	3,081
	Rent-land/buildings	32,347	67,767	43,092	2,500	23,653
	Other cash costs	34,172	97,180	15,607	11,218	12,853
Sub-total	104,682	241,516	93,653	31,405	66,962	
Capital	Depreciation	37,272	78,060	24,046	23,379	20,765
	Interest costs	28,740	70,653	13,827	15,523	22,348
	Sub-total	66,012	148,713	37,873	38,903	43,113
Management's compensation		44,631	81,709	40,760	25,480	45,637
Indirect costs total		245,269	533,672	196,601	111,162	179,527
Total all costs		892,182	2,130,011	682,081	317,565	801,581

**Table 5.** Cost efficiency indicators for Florida cut foliage businesses, 1997.

Cost category	All firms	Large firms	Medium firms	Small firms	Highly profitable firms
<b>Costs as Percentage of Total Sales</b>					
Employee labor	41%	42%	35%	46%	37%
Materials	13%	14%	12%	11%	11%
Finished plants	18%	20%	17%	12%	23%
Facility & equipment	3%	3%	3%	5%	3%
Overhead	12%	12%	12%	11%	8%
Capital costs	7%	7%	5%	13%	5%
Management/owner compensation	5%	4%	5%	9%	5%
<b>Costs per Acre of Production Area (thousands \$)</b>					
Employee labor	8.2	10.6	5.8	6.4	8.5
Materials	2.6	3.5	1.9	1.6	2.6
Facility & equipment	0.6	0.7	0.5	0.7	0.6
Overhead	2.3	2.9	2.1	1.5	1.8
Capital costs	1.5	1.8	0.8	1.8	1.1
Management/owner compensation	1.0	1.0	0.9	1.2	1.2
<b>Total Costs</b>	<b>16.2</b>	<b>20.5</b>	<b>12.1</b>	<b>13.3</b>	<b>15.9</b>

## Net Returns and Profitability

**Net Firm Income** is the difference between total income and total costs except management's (owners') compensation. Net firm income averaged \$166K for all firms and ranged from \$339K for large firms to \$24K for small firms (Table 6). Net income for highly profitable firms averaged \$217K .

**Net Margin** is the ratio between net income and total income or, in other words, the share of total income that is net income. Net margin averaged 16.4 percent for all firms, 14.2 percent for large firms, 24.9 percent for medium firms, and 7.7 percent for small firms. Highly profitable firms had net margins averaging 22.3 percent.

**Rate of Return on Assets** was calculated by dividing net income by the value of total assets. Return on assets averaged 18.8 percent for all firms, 19.6 percent for large firms, 30.6 percent for medium firms, and 4.7 percent for small firms. Highly profitable firms had an average return on assets of 28.6 percent.

**Rate of Return on Net Worth** is the most comprehensive measure of profitability and takes into account the financial risk embodied in the leverage factor (see below). It is comparable to annualized yields on stocks, bonds, or savings deposits. Return on net worth was calculated as the ratio of net income to net worth. Return on net worth averaged 34.7 percent for all firms, 41.6 percent for large firms, 48.9 percent for medium firms, and 7.8 percent for small firms. Highly profitable firms averaged 44.8 percent rate of return on net worth.

**Table 6.** Net returns and profitability for Florida cut foliage businesses, 1997

Measure	All firms	Large firms	Medium firms	Small firms	Highly profitable firms
Net Income: total income less total costs except management's compensation (thousands \$)	166	339	213	24	217
Net Margin: ratio of net income to total income	16.4%	14.2%	24.9%	7.7%	22.3%
Return on Assets: ratio of net income to total assets	18.8%	19.6%	30.6%	4.7%	28.6%
Return on Net Worth: ratio of net income to net worth	34.7%	41.6%	48.9%	7.8%	44.8%

### Balance Sheet and Financial Ratios

Assets and liabilities were taken to represent the mid-year financial position of firms, calculated as an average of beginning and ending balance sheet values as summarized in Table 7.

**Assets.** Total assets averaged \$883K for all firms and ranged from \$1.73M for large firms to \$524K for small firms. Current assets—including cash on hand, accounts receivable, and plant and supply inventories—averaged \$482K for all firms and ranged from \$957K for large firms to \$253K for small firms. Long-term assets—including investments in buildings, machinery, land and accumulated depreciation—averaged \$401K for all firms and ranged from \$776K for large firms to \$271K for small firms.

**Liabilities.** Total liabilities averaged \$405K for all firms and ranged from \$919K for large firms to \$212K for small firms. Current liabilities, including accounts payable and other liabilities payable within one year, averaged \$102K for all firms and ranged from \$361K for large firms to \$15K for medium and small firms. Long-term liabilities, including notes payable and mortgages, averaged \$303K for all firms and ranged from \$557K for large firms to \$198K for small firms.

**Net Worth.** Net worth or equity is the difference between total assets and total liabilities and represents the value of the owners' share of assets. Net worth averaged \$478K for all firms and ranged from \$814K for

large firms to \$312K for small firms.

**Leverage.** This measure expresses the ratio between total assets and net worth and is an indicator of long-term solvency. Higher values indicate greater risk, with potential for greater returns and greater losses. The leverage ratio averaged 1.85 for all firms, 2.13 for large firms, 1.60 for medium firms, 1.68 for small firms, and 1.57 for highly profitable firms (Table 8). Generally, leverage factors below 1.0 are considered to represent a very safe financial position. The impact of financial leverage on profitability can be understood as a multiplier: leverage multiplied by the rate of return to capital assets equals the rate of return on net worth.

**Quick Ratio.** The quick ratio is a measure of a firm's ability to meet short-term debts. It was calculated by dividing cash and accounts receivable by current liabilities. Cash and accounts receivable are the most liquid of current assets, which are usually available on short notice, but inventories are not included in this measure because they may not be immediately salable. A value for this ratio below 1.0 would indicate an illiquid position. The quick ratio averaged 1.18 for all firms, 4.08 for small firms, 5.53 for medium firms, and 0.74 for large firms. Highly profitable firms had a quick ratio of 1.90.

**Table 7.** Assets, liabilities and net worth for Florida cut foliage businesses, 1997.

		All firms	Large firms	Medium firms	Small firms	Highly profitable firms
thousands dollars						
Assets	Cash on hand	26	33	20	26	20
	Accounts receivable	94	233	65	34	76
	Plant inventory value	348	660	319	185	322
	Supply inventory value	13	30	8	8	10
	Total current assets	482	957	412	253	429
	Land*	212	341	158	177	205
	Machinery & equipment*	173	375	140	78	156
	Buildings & fixtures*	413	839	264	276	250
	Accumulated depreciation	(396)	(780)	(278)	(260)	(280)
	Total long-term assets	401	776	284	271	331
Total Assets		883	1,732	695	524	760
Liabilities	Current liabilities	102	361	15	15	51
	Long-term liabilities	303	557	245	198	224
	Total liabilities	405	919	260	212	275
Net Worth		478	814	435	312	485

\* Long-term assets valued at original cost.

**Table 8.** Financial ratios for Florida cut foliage businesses, 1997.

Ratio	All firms	Large firms	Medium firms	Small firms	Highly profitable firms
Asset/debt ratio (total assets/total liabilities)	2.18	1.89	2.67	2.47	2.77
Asset depletion (current value/original cost long-term assets)	0.50	0.50	0.50	0.51	0.54
Asset turnover ratio (sales/total assets)	1.15	1.38	1.23	0.60	1.28
Accounts receivable/sales	0.14	0.15	0.12	0.15	0.13
Current to long-term liabilities	0.34	0.65	0.06	0.07	0.23
Leverage factor (total assets/net worth)	1.85	2.13	1.60	1.68	1.57
Current ratio (cash on hand/current liabilities)	0.25	0.09	1.30	1.79	0.39
Quick ratio (cash & accounts receivable/current liabilities)	1.18	0.74	5.53	4.08	1.90

## Changes in Business Performance Between 1996 and 1997

The 12 cut foliage firms analyzed in this report also provided comparable information for the previous year (1996). Changes in the business analysis results between 1996 and 1997 for these 12 firms are summarized in Table 9. In general, business conditions were markedly improved, with net income and net margin increasing by over 100 percent in spite of a marginal decrease in total sales and income. This was due to a significant decrease in total expenses. Production area increased while labor employed decreased slightly. Total assets, total liabilities and net worth were also decreased. Results for production efficiency indicators were mixed, with own product sales per acre increasing while sales per FTE decreased an equivalent amount.

**Table 9.** Changes in business indicators for 12 cut foliage businesses in Florida from 1996 to 1997.

Measure	Percentage change 1996 to 1997
Total Sales	-8.2
Total Income	-1.7
Production Area (acres)	7.9
Labor Employed (FTE)	-1.6
Sales per FTE	-6.6
Own Product Sales per Acre	6.6
Total Expenses	-11.6
Total Assets	-11.0
Total Liabilities	-3.6
Net Worth	-16.5
Net Income	108.4
Net Margin	111.9
Rate of Return on Net Worth	149.6

## REFERENCES

- Hodges, A.W., L.N. Satterthwaite and J.J. Haydu. 1998. Business Analysis of Cut Foliage Businesses in Florida, 1996. *Economic Information Report EIR98-2*. University of Florida, Food & Resource Economics Department, Gainesville.
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- National Agricultural Statistics Service. 1998. *Floricultural Crops 1997 Summary*. Sp Cr 6-1(97). U.S. Department of Agriculture, Washington, D.C.
- National Agricultural Statistics Service. 1999. *Census of Agriculture, 1997, Vol. 1, Geographic Area Series, Part 9, Florida State and County Data, AC97-A-9*. U.S. Department of Agriculture, Washington, DC.
- Stamps, R.H. and C.A. Conover. 1986. Cut foliage production in Florida. *HortScience* 21(2):177-178, 343.

# APPENDIX

## Florida Cut Foliage Business Analysis Worksheet

With information requested by this form, the University of Florida will perform an analysis of your firm, and provide you with a report comparing your business with averages for similar firms in the program. This analysis will include efficiency indicators for use of land (space), labor and capital, costs of production, net income, financial position and profitability. Your information will be kept **strictly confidential**, but will be used anonymously for compilation of industry averages.

### General Instructions

The data submitted should be for the most recently completed accounting year. In order to perform a correct analysis, information must be provided for *all* sections of the worksheet. Or, you may submit a financial statement, and fill in only those sections not covered by the statement (sections 4, 5 and 7, and possibly part of section 2). You may also authorize an accountant to fill out the form for you.

When completed, return this worksheet to:

*Loretta Satterthwaite, Senior Statistician*  
*University of Florida, Institute of Food and Agricultural Sciences*  
*Central Florida Research and Education Center – Apopka*  
*2725 S. Binion Rd.*  
*Apopka, FL 32703-8504*  
*tel: 407/884-2034 x160; fax: 407/814-6186*  
*e-mail: LNS@gnv.ifas.ufl.edu*

### 1 General Information

---

Firm Name _____	Fiscal Year _____
Owner/Contact Person _____	Month Ended _____
Location/Street Address _____	County _____
City _____ Zip _____	Telephone (____) _____

Today's date \_\_\_\_\_

1a. **Crops Grown** (percentage of sales): \_\_\_\_\_ % leatherleaf          % tree fern

other (please specify crops and percentages below)

	(_____ %)
	(_____ %)
	(_____ %)
	(_____ %)



## 2. Income

A. Total crop sales ..... \$ \_\_\_\_\_

### By month or quarter

Jan \$ _____	Apr \$ _____	July \$ _____	Oct \$ _____
Feb \$ _____	May \$ _____	Aug \$ _____	Nov \$ _____
Mar \$ _____	June \$ _____	Sep \$ _____	Dec \$ _____
Qtr \$ _____	Qtr \$ _____	Qtr \$ _____	Qtr \$ _____

B. Value of crops resold from outside purchases<sup>1</sup> ..... \$ \_\_\_\_\_

C. Value of crop from off-site production<sup>1</sup> ..... \$ \_\_\_\_\_

D. Miscellaneous income ..... \$ \_\_\_\_\_

## 3. Fiscal Year Information

	Beginning Balance	Ending Balance
A. Value of Supplies in Inventory .....	\$ _____	\$ _____
B. Value of Plants in Inventory <sup>2</sup> (includes cooler) .	\$ _____	\$ _____
C. Original Cost of Land Owned .....	\$ _____	\$ _____
D. Current Assets, including Accounts Receivable <sup>3</sup>	\$ _____	\$ _____
E. Cash on Hand .....	\$ _____	\$ _____
F. Current Liabilities, including Accounts Payable	\$ _____	\$ _____
G. Long-Term Debt <sup>4</sup> .....	\$ _____	\$ _____

## 4. Current Market Value of Leased Property<sup>5</sup>

	Beginning Balance	Ending Balance
A. Current Value of Land Leased .....	\$ _____	\$ _____
B. Value of Machinery and Equipment Leased ...	\$ _____	\$ _____
C. Value of Buildings/Installations Leased .....	\$ _____	\$ _____

<sup>1</sup> This amount will be deducted from total sales to give net company-produced crop sales. Outside purchases are from other growers; off-site production means owned, but not included in acreage or expenses.

<sup>2</sup> Plant inventory valued at wholesale price, adjusted for percentage of completion of crops in production. For example, if fernery has even turnover, inventory averages 50% finished, so inventory value would be the wholesale price discounted 50%.

<sup>3</sup> Current assets less cash on hand, item E.

<sup>4</sup> Debt due beyond the current fiscal year, including mortgages and notes payable. Debt to officers in closely held (family) corporations (which is more like a capital investment by the owners than a debt) normally is not included.

<sup>5</sup> Assets leased to closely held (family) corporation by stockholders may be treated, at the participant's option, either as leased capital (this section) or as owned capital (sections 3 and 6).

**5. Production Area**

Enter acreage in use at beginning and end of fiscal year for:

	Beginning of Year	Ending of Year
A. Total farm area (owned & leased) <sup>6</sup> .....	_____	_____
B. Production area (shade & hammock) <sup>7</sup> .....	_____	_____
C. Acreage renovated this year .....	_____	_____

**6. Capital Assets and Depreciation<sup>8</sup>**

	Original Cost	Accumulated Depreciation	Depreciation this year
A. Machinery & Equipment <sup>9</sup> .....	\$ _____	\$ _____	\$ _____
B. Buildings & Installations <sup>10</sup> .....	\$ _____	\$ _____	\$ _____
Total .....	\$ _____	\$ _____	\$ _____

**7. Work Time<sup>11</sup>**

	Total Payroll Hours	or	Full-time Equivalents
A. Hourly workers .....	_____		_____
B. Non-hourly workers .....	_____		_____
Total .....	_____		_____

<sup>6</sup> All area used for fernery, including roads, offices, packing sheds and parking, as well as growing areas.

<sup>7</sup> Net growing area, excluding driveways, walkways, and other non-productive space. Use the facing page as a workspace for listing, if needed.

<sup>8</sup> A depreciation schedule or detailed balance sheet may be submitted in lieu of filling out this section. Use separate sheet to list items, if needed.

<sup>9</sup> Equipment used specifically for business operations. If unsure about proper category for any item, please list it on the facing page.

<sup>10</sup> Includes land improvements, wells, irrigation, fences, paving, office furniture and office equipment, as well as buildings.

<sup>11</sup> Enter total hours for all workers, including casual labor, part-time labor, piece-work laborers, clerical, salespersons, family members, and manager(s). For non-hourly workers or in cases where records are not available, time may be estimated in terms of full-time equivalents (2,080 hours/year; 52 weeks @ 40 hours/week).

**8. Expenses<sup>12</sup>**

A. Operator's salary or time value <sup>13</sup> .....	\$		\$	
B. Employees' salaries, wages, payroll taxes, and benefits .....	\$		\$	
\$	\$	\$	\$	\$
production wages	others (salaried)	sales commissions	health insurance	
\$	\$	\$	\$	\$
FICA	unemp. taxes	workers' comp.	other	
C. Plants and seeds for growing .....	\$		\$	
D. Fuel for production .....	\$		\$	
E. Fertilizer .....	\$		\$	
F. Lime .....	\$		\$	
G. Herbicides .....	\$		\$	
H. Fungicides .....	\$		\$	
I. Insecticides .....	\$		\$	
J. Nematicides .....	\$		\$	
K. Other chemicals .....	\$		\$	
L. Packing & shipping supplies .....	\$		\$	
M. Other production supplies (ties, plastic, small tools) .....	\$		\$	
N. Facility repairs & maintenance (including shadehouse plastic) .....	\$		\$	
O. Vehicle & equipment operating costs (including insurance & tags) .....	\$		\$	
P. Travel, trade shows & entertainment .....	\$		\$	
Q. Insurance (property & liability, not employee or vehicle related) .....	\$		\$	
R. Communications (telephones, fax, radios) .....	\$		\$	
S. Electric power .....	\$		\$	
T. Taxes (property, not sales), licenses, bonds .....	\$		\$	
U. Advertising .....	\$		\$	
V. Rent (land & buildings) .....	\$		\$	
W. Interest .....	\$		\$	
X. Other (itemize below, if available) .....	\$		\$	
bank charges .....	\$		postage .....	\$
dues & subscriptions .....	\$		professional services .....	\$
freight .....	\$		office supplies .....	\$
miscellaneous .....	\$		waste removal .....	\$
\$	\$		\$	\$
\$	\$		\$	\$

<sup>12</sup> A detailed statement of expenses may be submitted in lieu of filling-out this section.

<sup>13</sup> This should reflect total value of compensation to owner(s) and/or manager(s).

