

Summary of 2015 Central Florida (Ridge) and Indian River-Southwest Florida Citrus Custom Rate Charges

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A survey was conducted among companies offering citrus caretaking services to collect data on custom rate charges to Florida citrus growers. The questionnaire was sent by mail and data was collected from December 2015 to January 2016. Cooperatives, their members, and growers performing their own cultural practices were not included in this study; the custom rates for growers who are members of such cooperatives, or the costs for growers who conduct their own cultural practices, may differ from the average caretaker rates reported below.

Seventeen citrus caretakers from central Florida (Ridge) and ten from Indian River-Southwest Florida participated in the survey. Central Florida caretakers reported servicing approximately 35,000 acres planted to citrus while Indian River-Southwest Florida participants serviced almost 21,000 acres. Thus, central Florida participants account for roughly 24% of the total acreage in that region while those from the Indian River-southwest Florida account for 6.10%. Regarding this difference in acreage representation, it is worth mentioning that the majority of Indian River - southwest Florida growers perform their own cultural practices.

Since 2005, when Huanglongbing (HLB; citrus greening) was discovered in Florida, citrus acreage, yield, and production have decreased significantly. For example, during the period from 2005 to 2015, citrus acreage in central Florida decreased by 19% whereas in Indian River-southwest Florida citrus acreage decreased by 34%. Consequently, during the past few years, the Florida citrus industry has undergone a consolidation process, which has included caretaking firms. Such consolidation can sensibly be argued to be a contributing factor for obtaining fewer responses for this study compared to those of previous years.

The average custom rate charges for both regions are presented in Tables 1 and 2 along with the minimum and maximum rates reported in each case. Additional information on citrus budgeting and cost analysis, harvesting charges, packing charges and more can be obtained by contacting your County Extension Citrus Agent or going to the UF/IFAS EDIS website: <http://edis.ifas.ufl.edu> or UF/IFAS CREC Economics Extension website: www.crec.ifas.ufl.edu/extension/economics.

Table 1. Listing of 2015 custom rates reported by seventeen central Florida citrus caretakers.

Grove Practice	Unit	Rate Reported		
		Min	Max	Average ¹
Land Preparation & Equipment²				
Backhoe	Hour	45.00	75.00	58.71
Chop	Hour	34.70	45.00	38.23
V-Mower	Acre	13.50	16.50	15.00
V-Mower	Hour	42.50	45.00	43.75
Rotovate	Hour	30.00	75.00	46.33
Ant Bait Application with ATV	Hour	27.50	40.00	31.38
Scouting for Diseases and Pests	Hour	14.50	30.50	21.00
ATV with Driver	Hour	24.00	40.00	30.15
ATV with Driver for Admire application	Hour	24.00	40.00	31.06
Flatbed Truck with Driver	Hour	31.50	75.00	50.68
Pickup Truck with Driver	Hour	25.00	40.00	33.87
Tractor with Driver	Hour	20.00	50.00	36.09
Water Supply Truck with Driver	Hour	30.00	45.00	37.19
General Labor ³	Hour	13.50	20.00	16.56
Mechanic Labor ³	Hour	25.00	75.00	46.63
Mechanic Labor with Truck	Hour	45.00	85.00	58.58
Weed Management²				
Disc 7 - 8'	Acre	9.00	14.00	11.25
Disc 7 - 8'	Hour	35.00	40.00	37.25
Disc 9 - 10'	Acre	9.00	13.19	12.05
Disc 9 - 10'	Hour	35.00	43.50	39.20
Disc 11 - 12'	Acre	9.00	15.00	12.00
Bush Hog	Hour	24.00	42.00	35.63
Mow 5 - 7'	Acre	9.00	14.00	12.00
Mow 5 - 7'	Hour	36.50	40.00	38.06
Mow 8 - 12'	Acre	9.00	16.00	13.60
Mow 8 - 12'	Hour	38.00	45.00	40.88
Mow 13 - 16'	Acre	9.00	15.00	12.70
Mow 13 - 16'	Hour	35.00	38.00	36.50
Herbicide (Strip/Band - Single Boom)	Acre	13.81	18.00	16.03
Herbicide (Strip/Band - Single Boom)	Hour	38.55	41.50	40.03
Herbicide (Strip/Band - Double Boom)	Acre	14.00	16.50	15.30
Herbicide (Strip/Band - Double Boom)	Hour	42.00	60.00	51.00
Herbicide (Chemical Mow)	Acre	3.75	16.50	7.82
Herbicide (Chemical Mow)	Hour	42.28	60.00	51.14

Table 1. Listing of 2015 custom rates reported by seventeen central Florida citrus caretakers (cont'd).

Grove Practice	Unit	Rate Reported		
		Min	Max	Average ¹
Spraying Air Blast Sprayer with Electronic Sensors⁴				
125 GPA Engine Powered (500 gallons tank)	Acre	27.50	30.00	28.75
		PTO Powered (1,000 gallons tank)		
16 to 25 GPA	Acre	14.57	15.50	15.04
50 GPA	Acre	15.00	25.00	19.56
100 GPA	Acre	21.88	30.00	27.20
125 GPA	Acre	25.00	32.00	29.75
150 GPA	Acre	20.00	34.00	28.85
250 GPA	Acre	25.00	38.00	33.42
500 GPA	Acre	30.00	52.00	41.67
Irrigation²				
Start/Stop, System Supervision	Hour	16.00	40.00	28.79
Start/Stop, System Supervision	Run	17.50	50.00	35.75
Maintenance of Drip System	Hour	14.00	37.50	21.35
Maintenance of Microsprinkler System	Hour	13.50	37.50	22.10
Water Furrow Shaper	Acre	30.00	35.00	32.50
Ditch Mower	Hour	36.00	75.00	60.33
Fertilizer²				
Injection of Liquid Fertilizer into Irrigation System	Acre	2.00	4.50	3.22
Injection of Liquid Fertilizer into Irrigation System	Hour	22.00	50.00	38.83
Fertilizer- every middle	Acre	8.00	15.00	11.10
Fertilizer- every other middle	Acre	6.29	10.00	8.45
VRT Spreader - every middle	Acre	8.00	15.00	12.53
VRT Spreader - every other middle	Acre	7.00	11.50	8.90
Lime or Dolomite	Acre	9.60	15.00	11.92
Lime or Dolomite	Ton	9.00	11.00	10.00
Hand Spread	Acre	14.90	28.00	21.45
Hand Spread	Hour	13.50	37.50	21.22
Fertilizer Spreader (cost of tractor + spreader)	Hour	27.00	38.00	33.66
Pruning²				
Tractor Mounted Double Side	Hour	150.00	215.00	182.50
Self Propelled Double Side	Hour	215.00	300.00	268.50
Self Propelled	Hour	215.00	300.00	254.75
Brush Removal (push out of the grove)	Hour	16.00	70.00	55.12
Chop Brush	Hour	34.70	36.00	35.23
Mow Brush	Hour	24.00	45.00	36.46
Front-end Loader	Hour	60.00	95.00	69.23

Table 1. Listing of 2015 custom rates reported by seventeen central Florida citrus caretakers (cont'd).

Grove Practice	Unit	Rate Reported		
		Min	Max	Average ¹
Tree Removal				
Tree Clipping	Hour	63.00	85.00	70.80
Grinding Clipped Tree	Hour	160.00	170.00	165.00
Hauling Clipped Tree Out of Grove	Hour	60.00	75.00	68.33
Front-end Loader	Hour	60.00	95.00	69.34
Tree Resetting				
Rotovate Tree Site	Hour	38.00	45.00	41.60
Plant Tree and First Watering				
1-2 trees per acre	Tree	2.00	4.00	3.00
3-5 trees per acre	Tree	2.00	3.50	2.83
6-10 trees per acre	Tree	2.00	3.00	2.58
11-25 trees per acre	Tree	1.75	2.50	2.06
26+ trees per acre	Tree	1.70	2.25	1.98
Plant Tree and First Watering	Hour	13.50	20.00	16.17
Install Tree wrap	Hour	13.50	20.00	16.38
Grove Management				
Grove Care Supervision	Acre/month	1.25	10.00	4.43
Chemical/Handling Supervision	Percent	10.00	25.00	17.25
Marketing and Fruit Handling	Box	0.15	0.25	0.20
Travel/Set up Charge	Hour	50.00	75.00	61.25

¹ Calculated by averaging the total number of data points reported.

² Rates include labor and equipment.

³ Rates only include labor.

⁴ Rates are based on every middle application.

⁵ Some rates include labor and equipment and others only include labor.

Table 2. Listing of 2015 custom rates reported by ten Indian River & southwest citrus caretakers.

Grove Practice	Unit	Rate Reported		
		Min	Max	Average ¹
Land Preparation & Equipment²				
Backhoe	Hour	40.00	75.00	55.17
V-Mower	Acre	13.00	16.00	14.30
V-Mower	Hour	45.00	75.00	58.33
Rotovate	Hour	50.00	75.00	59.00
Ant Bait Application with ATV	Acre	5.00	10.00	7.00
Scouting for Diseases and Pests	Hour	40.00	50.00	45.00
ATV with Driver	Hour	16.50	35.00	26.40
ATV with Driver for Admire application	Hour	25.00	35.00	29.31
Flatbed Truck with Driver	Hour	75.00	100.00	87.50
Pickup Truck with Driver	Hour	30.00	50.00	40.36
Tractor with Driver	Hour	35.00	52.00	42.00
Water Supply Truck with Driver	Hour	35.00	45.00	41.10
General Labor ³	Hour	9.00	22.00	16.87
Mechanic Labor ³	Hour	15.00	75.00	56.67
Mechanic Labor with Truck	Hour	45.00	85.00	64.17
Weed Management²				
Disc 7 - 8'	Hour	40.00	50.00	45.00
Disc 9 - 10'	Hour	35.00	60.00	47.75
Mow 8 - 12'	Acre	11.00	16.00	13.17
Mow 13 - 16'	Acre	13.50	16.00	14.63
Mow 13 - 16'	Hour	35.00	75.00	52.50
Herbicide (Strip/Band - Single Boom)	Acre	15.00	18.00	16.50
Herbicide (Strip/Band - Double Boom)	Acre	12.00	15.50	14.36
Herbicide (Chemical Mow)	Acre	3.00	12.00	6.78
Spraying Air Blast Sprayer With Electronic Sensors⁴				
50 GPA PTO Powered (400 to 500 gallons tank)	Acre	30.00	35.00	32.50
		<u>PTO Powered (1,000 gallons tank)</u>		
100 GPA	Acre	18.00	30.00	25.20
125 GPA	Acre	20.00	35.00	29.50
150 GPA	Acre	20.00	34.00	27.00
250 GPA	Acre	25.00	38.00	31.90
500 GPA	Acre	30.00	52.00	42.50
		<u>Engine Powered (500 to 1,000 gallons tank)</u>		
100 GPA	Acre	31.00	32.00	31.50
125 GPA	Acre	32.50	34.00	33.25
150 GPA	Acre	32.50	36.00	34.25
250 GPA	Acre	39.25	40.00	39.63
500 GPA	Acre	45.50	47.00	46.25

Table 2. Listing of 2015 custom rates reported by ten Indian River & southwest citrus caretakers (cont'd).

Grove Practice	Unit	Rate Reported		
		Min	Max	Average ¹
Irrigation²				
Start/Stop, System Supervision	Hour	16.00	40.00	31.50
Start/Stop, System Supervision	Run	25.00	50.00	34.60
Maintenance of Drip System ⁵	Hour	13.00	14.00	13.50
Maintenance of Microsprinkler System ⁵	Hour	13.00	20.00	16.38
Water Furrow Disc	Hour	35.00	50.00	45.55
Water Furrow Cleaner	Hour	42.00	50.00	46.00
Water Furrow Shaper	Hour	37.00	100.00	68.50
Ditch Mower	Hour	45.00	90.00	61.30
Rotary Ditcher or Auger	Hour	38.50	50.00	47.70
Fertilizer²				
Injection of Liquid Fertilizer into Irrigation System	Hour	29.00	50.00	42.50
Fertilizer- every middle	Acre	7.00	12.00	9.00
VRT Spreader - every middle	Acre	8.00	13.50	11.55
VRT Spreader - every other middle	Acre	8.00	11.50	9.63
Lime or Dolomite	Acre	10.00	12.00	11.00
Hand Spread ⁵	Hour	16.00	35.00	22.78
Pruning²				
Single side	Acre	18.00	30.00	24.00
Self Propelled Double Side	Acre	24.00	30.00	27.00
Tractor Mounted	Acre	35.00	40.00	37.50
Brush Removal (push out of the grove)	Hour	70.00	75.00	72.50
Mow Brush	Hour	12.00	65.00	35.50
Front-end Loader	Hour	75.00	75.00	75.00
Tree Removal				
Tree Clipping	Hour	70.00	85.00	76.67
Grinding Clipped Tree	Hour	160.00	230.00	195.00
Hauling Clipped Tree Out of Grove	Hour	75.00	85.00	80.00
Grinding Tree in place	Hour	160.00	230.00	195.00
Front-end Loader	Hour	70.00	85.00	76.25
Grove Management				
Grove Care Supervision	Acre/Month	3.00	10.00	5.31
Chemical/Handling Supervision	Percent	5.00	15.00	11.17
Marketing and Fruit Handling	Box	0.05	1.05	0.34
Travel/Set up Charge	Hour	50.00	100.00	66.67

¹ Calculated by averaging the total number of data points reported.

² Rates include labor and equipment.

³ Rates only include labor.

⁴ Rates are based on every middle application.

⁵ Some rates include labor and equipment and others only include labor.

References

Ronald P. Muraro. Summary of 2012 Ridge and Indian River-South. Lake Alfred, Citrus Research and Education Center (CREC), University of Florida, 2012.

United States Department of Agriculture (USDA) - National Agricultural Statistics Service (NASS). Florida Citrus Statistics, various issues.

United States Department of Agriculture (USDA) - National Agricultural Statistics Service (NASS). Citrus Summary, various issues.