

Summary of 2008 Ridge and Indian River-South Florida Citrus Custom Rate Charges

Ronald P. Muraro, Farm Management Economist
University of Florida, IFAS, CREC, Lake Alfred, FL

This year's annual questionnaire surveys were conducted through the mail from March through May. Seventeen citrus caretakers participated in the Ridge area survey, while fourteen citrus caretakers participated in the Indian River-South Florida area survey. Cooperatives, their members, and growers performing their own cultural practices were not included in this study. The author expresses sincere thanks to those caretakers and their staffs who took time from their busy schedules to report their custom charges.

The Ridge caretakers reported servicing 51,825 acres planted to citrus or 3,239 acres per caretaker. The Indian River-South Florida participants serviced 27,520 total acres or 3,440 acres per caretaker. A majority of Indian River-South Florida growers conduct their own cultural practices. During the past few years, there has been a consolidation among citrus caretaker firms along with citrus grove acreage resulting in fewer citrus caretakers participating in the annual study. Also, from 2004 to 2008 primarily due to the citrus canker eradication program, real estate development, and the removal of HLB-citrus greening symptomatic trees, there has been a 29% reduction of the citrus acreage in the Indian River-South Florida region compared to a 17% acreage reduction in all the other citrus regions.

The itemized custom rates, expressed as the low and high rate reported, along with the average of the rates for the 2008 surveys are the most current available (Tables 1 and 2). During

the past several years, more citrus caretakers have been reporting the use of **electronic sensing technology** as shown in the **spraying section** on the 2008 summary of the citrus caretaker custom rate charges. The affect of higher fuel costs from 2007 to 2008 was an overall 11% increase in custom rates for 2008. Many citrus caretakers added a 5% surcharge to cover the higher cost of gasoline and diesel. Custom rates for growers who are members of cooperatives and costs for growers who conduct their own cultural practices may differ from these average caretaker rates.

Additional information on citrus budgeting and cost analysis and harvesting charges (pick, roadside and hauling) 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 website:

www.crec.ifas.ufl.edu/extension/economics

Table 1. A listing of 2008 custom rates reported by seventeen Ridge citrus caretakers

Grove Practice	Unit	Range of Rate Reported		Average Rate ^y	Comments		
CULTIVATION AND EQUIPMENT:							
Labor	Hour	\$12.85-	\$21.10	\$14.60	Plus transportation		
Mechanic Labor	Hour	30.00-	45.00	36.72			
Mechanic Labor with Truck	Hour	50.00-	65.00	56.35			
Rotovate	Hour	37.50-	50.00	42.43			
Disc 7'	Acre	10.00-	12.50	11.13	Averaged \$38.67/hour		
Disc 9'-10'	Hour	34.00-	52.00	41.50			
Disc 9'-10'	Acre	8.50-	12.50	10.55	One-way discing		
Chop	Acre	9.75-	12.25	10.74			
Chop	Hour	34.00-	48.00	38.40			
Mow 5'-7'	Hour	31.10-	45.50	39.32			
Mow 9'-12'	Hour	36.00-	42.00	39.57			
Mow 5'-7'	Acre	11.00-	14.00	12.94			
Mow 9'-12'	Acre	10.50-	13.25	11.67			
Mow 15'-16'	Acre	10.50-	15.00	12.69			
Herbicide ^z (Strip/Band--Single Boom)	Acre	14.50-	20.00	16.09	Plus materials; Avg. \$35.41/hour		
Herbicide ^z (Strip/Band--Double Boom)	Acre	12.00-	18.90	14.72	Plus materials; Avg. \$38.19/hour		
Herbicide ^z (Chemical Mow)	Acre	5.00-	10.00	7.65	Plus materials		
Temik ^z	Acre	15.00-	19.50	16.42	Plus materials		
Plow	Hour	29.50-	50.00	39.45			
Deviner	Hour	—	—	47.00			
Bush Hog	Hour	32.00-	46.00	37.07	One reporting \$9.50/acre		
Backhoe	Hour	40.00-	55.00	48.80			
Pickup Truck with Driver	Hour	30.00-	55.00	37.94	One reporting 72¢/mile; Average miles/year: 26,400		
Flatbed Transport Truck with Driver	Hour	45.00-	100.00	65.55	Average miles/year: 37,320		
Tractor with Driver	Hour	27.00-	45.00	36.18			
Water/Supply Truck	Hour	31.50-	50.00	38.20			
ATV with Driver	Hour	23.00-	35.00	28.13			
SPRAYING:^z							
PTO AIR BLAST SPRAYER							
		1,000 Gallon Tank with Electronic Sensing			1,000 Gallon Tank without Electronic Sensing		
		Low	High	Average	Low	High	Average
500 GPA	Acre	\$32.00-	\$40.00	\$35.67	\$32.00 -	\$38.00	\$34.83
250 GPA	Acre	29.00-	34.75	32.19	30.00 -	35.00	32.75
125 GPA	Acre	24.00-	30.75	27.58	24.00 -	32.50	28.63
100 GPA	Acre	23.00-	25.00	24.20	22.00 -	27.00	24.82
50 GPA	Acre	—	—	20.00			
PTO - Variable Rate: \$30/acre @ 200 GPA; Engine Driven 500/1,000 gal tank @ \$60/hour							
Aerial (Bell-47 Helicopter) \$13.00 @ 5 GPA; \$18.50 @ 10 GPA; \$23.00 @ 15 GPA; \$26.00 @ 20 GPA							
FERTILIZE AND SOIL AMENDMENTS:^z							
Inject Liquid Fertilizer into Irrigation System	Hour	\$36.50-	\$40.00	\$39.46	Truck plus labor and plus materials		
Inject Liquid Fertilizer into Irrigation System	Acre	2.00-	3.50	2.66	One reporting \$100/irrigation injection hookup		
Dry (Bulk)	Acre	8.50-	13.00	10.05	Average with electronic sensing: \$11.50/acre		
Lime or Dolomite	Acre	8.50-	13.00	10.60			
Lime or Dolomite	Ton	9.00-	11.00	9.63			
Fertilize Young Trees: ^z Hand Spread	Hour	12.85-	21.10	14.60	Plus transportation and materials		
Fert. Spreader	Hour	27.50-	40.00	34.17	Plus materials; Average \$9.09/acre		
Airblast Spreader with Gator for Resets		\$40.75/hour plus materials					
IRRIGATION:							
Microsprinkler	Hour	35.00-	47.00	38.73	Start/stop and supervision; truck and driver		
ATV with Driver	Hour	23.00-	35.00	28.17	Check/repair microsprinkler irrigation system-plus materials		
Ring Young Trees: Hand Labor	Hour	12.85-	21.10	14.60	Plus transportation		

(OVER)

Table 1. A listing of 2008 custom rates reported by seventeen Ridge citrus caretakers (cont'd.)

Grove Practice	Unit	Range of Rate Reported		Average Rate ^y	Comments
REMOVING TREES:					
Tree Shearing (Cutting Tree at Ground Level)	Hour	\$58.50-	\$70.00	\$64.75	Average trees sheared: 5 to 15 trees/hour
Front-end Loader	Hour	54.00-	85.00	65.20	Average trees removed: 5 to 15 trees/hour
Bulldozer	Hour	50.00-	60.00	55.94	
Front-end Loader with Tree Spade - \$65/hour; Excavation - \$115/hour; Site Preparation to Replant - \$65/hour					
PRUNING:					
Hedging:					
Double Side (Tractor Mounted)	Hour	\$220.00-	\$240.00	\$230.00	5 to 10 acres/hour
Double Side (Tractor Pulled)	Hour	195.00-	205.00	200.00	4 to 10 acres/hour; \$21.00/acre
Double Side (Self Propelled)	Hour	275.00-	325.00	306.67	8 to 20 A/H depending on wood size; \$16/A annual cut \$15/acre to \$30/acre annual cut depending on wood size
Topping:					
Self Propelled	Hour	—	—	400.00	Cover 5-10 Ac/Hr (Roof Top); 5-20 Ac/Hr (Flat Top)
Double Sided Topper (Self Propelled)	Hour	285.00-	315.00	300.00	Avg. 8-15 A depending on wood size type of cut; \$25/A
Double Sided (Tractor Mounted)	Hour	—	—	200.00	
Double Sided (Tractor Pulled)	Hour	—	—	175.00	One reporting \$27.50/acre
Limb Lifter/Tree Skirt Trimmer	Acre	—	—	18.00	3 to 5 acres/hour
Limb Lifter/Tree Skirt Trimmer (Single Side)	Hour	—	—	85.00	
Limb Lifter/Tree Skirt Trimmer (Double Sided Rotary)	Hour	—	—	140.00	6 to 20 acres/hour
Removing Brush:					
Haul Brush out of Grove	Hour	39.70-	55.00	46.54	Tractor-trailer plus 2 people
Front-end Loader (Push Brush)	Hour	54.00-	85.00	65.20	2-10 acres/hour
Chop/Mow Brush	Hour	37.50-	58.00	42.59	3-6 acres/hour; \$9.50/acre
COLD PROTECTION:					
Annual Maintenance Cost for Wraps	Tree	—	—	\$ 0.35	
Install Wraps	Each	0.39-	0.50	0.43	
OTHER CUSTOM RATES:					
Plant Resets	Per Tree	\$ 1.75-	\$ 3.00	\$ 2.58	Stake, plant and first watering
Solid Set Planting	Per Tree	1.45-	1.65	1.54	Stake, plant and first watering
Travel/Setup Charge	Hour	50.00-	75.00	63.34	One reporting \$100 up to 20 miles
Grove Management Charge/Month:					
Supervising Grove Care Operations	Acre	2.50-	6.00	3.50	In addition to caretaking charges; One reporting 6% of
Supervising Grove Care Operations	Acre/Year	—	—	50.00	Average for those reporting \equipment labor charge
Handling Fruit Marketing	Box	0.10-	0.30	0.19	
Supervising/Handling Chemicals/Fertilizer		10% to 25% of materials cost; Average: 17%			
Charge for personnel to oversee harvesting operations and coordinate harvest in different blocks/groves and keeping of harvesting labor compliance record.		10¢/box to 20¢/box; average 17¢/box			<u>Note:</u> One reporting adding a 10% fuel surcharge on all billed equipment charges.
Consulting		Cultural Management/Horticultural Evaluation - \$300/hr Financial Analysis Prospectus - \$400/hr			
Total Reported Acreage Provided Grove Service to:	Acre	1,100-	12,500	3,239	Total acres reporting: 51,825

^z Plus materials. Caretakers reporting rates include labor, tractor and sprayer; supply truck included by most caretakers.

^y Calculated by dividing the total number of caretakers reporting a grove practice rate into the sum reported. Unless otherwise stated, labor included with all charges.

^x Low acres is for 2 years regrowth hedging; high acres is for annual maintenance hedging.

Source: Ronald P. Muraro, Extension Farm Management Economist, Lake Alfred CREC, September 2008.

Table 2. A listing of 2008 custom rates reported by ten Indian River and South Florida citrus caretakers

Grove Practice	Unit	Range of Rate Reported		Average Rate ^y	Comments	
CULTIVATION AND EQUIPMENT:						
Labor	Hour	\$ 13.50-	\$21.75	\$16.70	Plus transportation and equipment	
Mechanic Labor	Hour	36.00-	55.00	47.22	Labor and service truck	
Rotovate	Hour	38.00-	45.00	42.00		
Disc 7-8'	Hour	39.00-	40.00	39.67	One reporting \$10.00/acre	
Disc 10-12'	Hour	38.00-	50.00	42.67	One reporting \$13.50/acre	
Mow: 7-8'	Hour	42.00-	46.00	42.33		
9-10'	Hour	38.00-	50.00	43.25	Average \$13.00/acre	
15-16'	Hour	38.00-	55.00	47.32	\$11.50/acre	
V-Mower	Hour	40.00-	50.00	45.00	\$11.00/acre	
Herbicide ^z (Strip/Band–Single Boom)	Hour	38.00-	40.00	39.50	Plus materials; \$14.00/acre	
Herbicide ^z (Strip/Band–Double Boom)	Acre	13.00-	15.50	14.29	Plus materials	
Herbicide ^z (Chemical Mow)	Acre	3.50-	5.00	4.10	Plus materials	
Temik ^z	Acre	12.50-	17.50	14.92	Plus materials	
Plow	Hour	40.00-	45.00	42.00		
Backhoe	Hour	47.50-	63.00	55.10		
Bush Hog	Hour	40.00-	45.00	43.75		
Middle Buster	Hour	40.00-	42.00	40.97	With tractor and driver	
Mound Builder	Hour	40.00-	50.00	43.34	With tractor and driver	
Grader Blade	Hour	38.00-	45.00	42.67	Tractor/blade and driver	
Water Truck with Driver	Hour	38.50-	45.00	41.17		
Pickup Truck with Driver	Hour	35.00-	55.00	39.00	Average miles traveled per year: Pick-up truck – 23,750 miles	
Flatbed/Transport Truck with Driver	Hour	65.00-	90.00	76.67		
Tractor with Driver	Hour	33.50-	45.00	36.90		
ATV with Driver	Hour	23.50-	30.00	26.17		
SPRAYING:^z						
		PTO AIR BLAST SPRAYER			ENGINE DRIVEN AIR BLAST SPRAYER	
		1,000 Gallon Tank with Electronic Sensing			500 Gallon Tank	
		Low	High	Average	Average	
500 GPA	Acre	\$41.00-	\$45.00	\$42.35	\$40.08	
250 GPA	Acre	32.00-	38.75	35.74	34.72	
125 GPA	Acre	30.00-	37.00	33.00	27.28	
100 GPA	Acre	—	—	24.00		
Curtec (25 GPA to 30 GPA)	Acre	26.00-	29.00	27.67		
		PTO AIR BLAST SPRAYER				
		1,000 Gallon Tank without Electronic Sensing				
		Low	High	Average		
500 GPA	Acre	\$38.00-	\$45.00	\$40.25		
250 GPA	Acre	36.00-	38.75	37.24		
125 GPA	Acre	30.00-	34.00	30.60		
Aerial		Fixed Wing: \$7.75/acre @ 10 gallons per acre; \$8.00/acre @ 15 gallons per acre				
		Hand Sprayer (500 gallon tank) with tractor and 2 workers – \$45.00/hour				
FERTILIZING:^z						
Inject Liquid Fertilizer into Irrigation System	Hour	\$35.00-	\$40.00	\$38.34	Tractor with irrigation pump	
Dry (Bulk)	Acre	8.50-	11.00	9.29	Plus materials	
Dry (Bulk) VRT Spreader-Electronic Sensor	Acre	—	—	7.75	Plus materials	
Lime or Dolomite	Acre	8.50-	10.50	9.17	Plus materials	
Fertilize Young Trees: ^z	Hand Spread	Hour	12.50-	22.00	16.43	Plus transportation and materials; 15¢/tree
	Hand Spread		One reporting \$40.00/hour (ATV and 2 people) plus materials			
	Fert. Spreader		Average: \$8.75/acre; \$32.00/hour			Plus materials

(OVER)

Table 2. A listing of 2008 custom rates reported by ten Indian River and South Florida citrus caretakers (cont'd.)

Grove Practice	Unit	Range of Rate Reported		Average Rate ²	Comments
IRRIGATION:					
Ditch Mower	Hour	\$40.00-	\$45.00	\$ 43.34	
Water Furrow Disc	Hour	38.00-	45.00	41.50	
Water Furrow Cleaner	Hour	35.00-	45.00	40.67	
Water Furrow Shaper	Hour	63.00-	75.00	68.67	
Rotary Ditcher or Auger	Hour	40.00-	45.00	41.67	
Microsprinkler/Drip Irrigation Maintenance	Acre/Month	4.50-	6.00	5.09	Check & repair system; parts extra
REMOVING TREES:					
Front-end Loader	Hour	\$65.00-	\$75.00	\$68.10	Avg. range 10-20 trees per hour
Tree Shearing (Cutting Tree at Ground Level)	Hour	65.00-	75.00	70.00	Avg. range 5-15 trees per hour
Prepare Site for Replanting	Tree	\$0.25 - \$1.00			
PRUNING:					
Hedging:					
Double Side (Tractor Mounted)	Hour	\$220.00-	\$240.00	\$230.00	5 to 10 acres/hour
Double Side (Tractor Pulled)	Hour	195.00-	205.00	200.00	4 to 10 acres/hour; \$21.00/acre
Double Side (Self Propelled)	Hour	275.00-	325.00	306.67	8 to 20 A/H depending on wood size; \$16/A annual cut \$15/acre to \$30/acre annual cut depending on wood size
Topping:					
Double Sided Topper (Self Propelled)	Hour	285.00-	315.00	300.00	Avg. 8-15 A depending on wood size type of cut; \$25/A
Double Sided (Tractor Mounted)	Hour	—	—	200.00	
Double Sided (Tractor Pulled)	Hour	—	—	175.00	One reporting \$27.50/acre
Limb Lifter/Tree Skirt Trimmer	Acre	—	—	18.00	3 to 5 acres/hour
Limb Lifter/Tree Skirt Trimmer (Single Side)	Hour	—	—	85.00	
Limb Lifter/Tree Skirt Trimmer (Double Sided Rotary)	Hour	—	—	140.00	6 to 20 acres/hour
Removing Brush:					
Haul Brush out of Grove (Front-End Loader)	Hour	65.00-	75.00	68.67	Tractor & driver, trailer and 2 workers: \$63.67/hour
Mow/Chop Brush	Hour	40.00-	65.00	51.00	One reporting \$18/acre
OTHER CUSTOM RATES:					
Install Tree Wraps		25¢-75¢/tree depending on type of wrap and number of trees; Annual maintenance cost: 45¢/tree			
Plant Trees (Solid Set)	Tree	\$ 1.25-	\$ 2.50	\$ 1.69	Varies as to density
Plant Trees (Resets)	Tree	2.00-	3.00	2.45	Varies as to the number of resets
Grove Management Charge/Month:					
Supervising Grove Care Operations	Acre	3.50-	9.50	5.97	In addition to caretaking charges
Handling Fruit Marketing		\$0.05-\$0.25/box – For Supervising and Marketing fruit			
Supervising/Handling Chemicals/Fertilizer		5% to 20% of materials cost			
Total Reported Acreage Provided Grove Service to:	Acre	800-	7,000	3,440	Total acres reporting: 27,520

²Plus materials. Caretakers reporting rates include labor, tractor and sprayer; supply truck included by most caretakers.

³Calculated by dividing the total number of caretakers reporting a grove practice rate into the sum reported. Unless otherwise stated, labor included with all charges.

⁴Low acres is for 2 years regrowth hedging; high acres is for annual maintenance hedging.

Source: Ronald P. Muraro, Extension Farm Management Economist, Lake Alfred CREC, September 2008.