

Summary of 2006 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. Twenty-five citrus caretakers participated in the Ridge area survey, while sixteen 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 63,077 acres planted to citrus or 3,154 acres per caretaker. The Indian River-South Florida participants serviced 21,455 total acres or 2,384 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 2006 primarily due to the citrus canker eradication program, there has been a 29% reduction of the citrus acreage in the Indian River region compared to a 14% 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 2006 surveys are the most current available (Tables 1 and 2). During the past four years, more citrus caretakers have been reporting the use of **electronic sensing**

technology as shown in the **spraying section** on the 2006 summary of the citrus caretaker custom rate charges. From 2005 to 2006, the average increase in fuel costs (gasoline and diesel) was about 10% with an average increase in custom caretaker rates of 8%. 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 UF/IFAS EDIS website: <http://edis.ifas.ufl.edu>

Table 1. A listing of 2006 custom rates reported by twenty-three Ridge citrus caretakers

Grove Practice	Unit	Range of Rate Reported		Average Rate ^y	Comments		
CULTIVATION AND EQUIPMENT:^z							
Labor	Hour	\$11.50-	\$20.00	\$14.66	Plus transportation		
Tractor/Equipment Operator	Hour	12.50-	21.00	16.00			
Mechanic Labor	Hour	25.00-	35.00	32.29			
Mechanic Labor with Truck	Hour	40.00-	55.00	48.17			
Rotovate	Hour	32.00-	50.00	39.40			
Disc 7'	Hour	30.50-	45.00	36.10			
Disc 9'-10'	Hour	32.00-	47.00	36.90			
Disc 9'-10'	Acre	9.00-	11.25	10.32	One-way discing; Disc 7': \$9.00/acre		
Chop	Hour	32.00-	50.00	37.71			
Mow 5'-7'	Hour	31.10-	45.00	37.30			
Mow 9'-12'	Hour	32.00-	45.00	36.05			
Mow 5'-7'	Acre	9.00-	12.00	11.00			
Mow 9'-12'	Acre	10.00-	12.75	11.84			
Mow 15'-16'	Acre	10.50-	15.00	12.57			
Herbicide ^z (Strip/Band--Single Boom)	Acre	13.00-	18.50	15.43	Plus materials; Avg. \$32.88/hour		
Herbicide ^z (Strip/Band--Double Boom)	Acre	12.50-	18.00	14.72	Plus materials; Avg. \$37.20/hour		
Herbicide ^z (Chemical Mow)	Acre	6.00-	10.75	8.25	Plus materials		
Temik ^z	Acre	14.75-	17.00	15.69	Plus materials		
Plow	Hour	30.00-	40.00	35.42			
Deviner	Hour	35.00-	50.00	43.75			
Bush Hog	Hour	32.00-	46.00	38.06			
Backhoe	Hour	42.50-	50.00	46.25			
Pickup Truck with Driver	Hour	25.00-	40.00	34.30	Average miles/year/pickup: 24,200		
Pickup Truck w/out Driver	Hour	17.50-	24.00	21.56			
Flatbed Transport Truck with Driver	Hour	35.00-	50.00	40.60	Average miles/year: 24,803		
Low-Boy Transport	Hour	50.00-	80.00	60.72	Average miles/year: 30,000		
Tractor with Driver	Hour	27.00-	40.00	31.87			
Water/Supply Truck	Hour	29.25-	40.00	37.52			
ATV with Driver	Hour	22.00-	30.00	25.03			
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	\$ —	\$ —	\$37.50	32.00 -	38.50	36.00
250 GPA	Acre	30.00-	35.00	33.00	27.00 -	35.00	30.63
125 GPA	Acre	27.25-	33.00	29.55	24.00 -	32.50	26.98
100 GPA	Acre	23.00-	25.00	24.40	22.50 -	30.00	24.65
Aerial (Bell-47 Helicopter)		\$12.00 @ 5 GPA; \$16.50 @ 10 GPA; \$20.00 @ 15 GPA; \$23.00 @ 20 GPA					
FERTILIZE AND SOIL AMENDMENTS:^z							
Inject Liquid Fertilizer into Irrigation System	Hour	\$35.00-	\$50.00	\$40.00	Truck plus labor		
Inject Liquid Fertilizer into Irrigation System	Acre	1.75-	3.50	2.54	Average \$65.00/irrigation injection hookup		
Liquid Boom Application: Double Boom	Acre	15.00-	16.50	15.71			
Dry (Bulk)	Acre	7.00-	11.55	9.41	Average with electronic sensing: \$12.00/acre		
Lime or Dolomite	Acre	8.50-	11.30	9.65			
Lime or Dolomite	Ton	8.00-	10.00	9.29			
Fertilize Young Trees: ^z Hand Spread	Hour	11.50-	20.00	14.66	Plus transportation and materials		
Fert. Spreader	Hour	25.00-	40.00	31.29	Plus materials; Average \$9.09/acre		
Airblast Spreader with Gator for Resets		\$30.00/hour; \$3.00/acre					
IRRIGATION:							
Microsprinkler	Acre	\$ —	\$ —	\$ 3.83	Start/stop and supervision		
Microsprinkler	Hour	25.00-	40.00	33.75	Start/stop and supervision; truck and driver		
ATV with Driver	Hour	22.00-	30.00	25.03	Check/repair microsprinkler irrigation system-plus materials		
Ring Young Trees: Hand Labor	Hour	11.50-	20.00	14.66	Plus transportation		

Table 1. A listing of 2006 custom rates reported by twenty-three Ridge citrus caretakers (cont'd.)

Grove Practice	Unit	Range of Rate Reported		Average Rate ^z	Comments
REMOVING TREES:					
Tree Shearing (Cutting Tree at Ground Level)	Hour	\$59.50-	\$65.00	\$63.17	Avg.: \$10.25/tree; Avg. trees sheared: 5 to 15 trees/hour
Front-end Loader	Hour	50.00-	80.00	63.05	Average trees removed: 5 to 15 trees/hour
Bulldozer	Hour	50.00-	60.00	53.34	
Front-end Loader with Tree Spade	Hour	—	—	65.00	
PRUNING:					
Power Saw with Operator	Hour	\$20.00-	\$25.45	\$ 23.64	Plus transportation; Average \$7.65/hour without operator
Limb Lifter/Tree Skirt Trimmer (Double Sided)	Hour	—	—	195.00	Cover 8-12 acres one pass
Hedging:					
Single Side (Tractor Mounted)	Hour	—	—	77.00	
Double Side (Tractor Mounted)	Hour	—	—	230.00	
Double Side (Self Propelled)	Acre	—	—	25.00	
Double Side (Self Propelled)*	Hour	—	—	355.00	Cover 10-25 acres/hour depending on wood size
Double Side (Self Propelled)*	Hour	250.00-	295.00	273.34	Cover 4-12 acres/hour depending on wood size
Topping:					
Tractor Mounted	Hour	—	—	200.00	
Tractor Pulled	Hour	—	—	105.00	
Self Propelled	Hour	—	—	390.00	Cover 5-10 acres/hr (Roof Top); 5-20 acres/hr (Flat Top)
Self Propelled	Hour	275.00-	325.00	298.34	
Removing Brush:					
Haul Brush out of Grove	Hour	32.50-	46.60	38.62	Tractor-trailer/truck; plus 2 people
Front-end Loader (Push Brush)	Hour	50.00-	70.00	58.53	2-10 acres/hour
Chop/Mow Brush	Hour	34.00-	50.00	41.57	3-6 acres/hour
COLD PROTECTION:					
Mechanical (Bank and Unbank)	Hour	\$27.50-	\$35.00	\$31.25	
Install Wraps	Each	0.35-	0.40	0.37	
OTHER CUSTOM RATES:					
Plant Resets	Per Tree	\$ 2.00-	\$ 4.00	\$ 2.90	Stake, plant and first watering
Solid Set Planting	Per Tree	1.60-	2.00	1.73	Stake, plant and first watering
Travel/Setup Charge	Hour	42.00-	50.00	45.67	One reporting \$150 minimus over 20 miles
Grove Management Charge/Month:					
Supervising Grove Care Operations	Acre	2.00-	7.00	3.39	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	0.15-	0.50	0.28	
Supervising/Handling Chemicals/Fertilizer	10% to 25% of materials cost; Average: 18%				
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 15¢/box	Note: One reporting adding a 10% fuel surcharge on all billed equipment charges.			
Consulting	Cultural Management/Horticultural Evaluation - \$100/hr to \$300/hr Financial Analysis Prospectus - \$300/hr				
Total Reported Acreage Provided Grove Service to:	Acre	600-	11,700	3,154	Total acres reporting: 63,077

^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 2006.

Table 2. A listing of 2006 custom rates reported by fourteen 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	\$16.22	Plus transportation and equipment	
Mechanic Labor	Hour	37.75-	55.00	45.25	Labor and service truck	
Rotovate	Hour	40.00-	45.00	41.80		
Disc 7-8'	Hour	35.00-	40.00	39.00		
Disc 10-12'	Hour	35.00-	45.00	39.20	One reporting \$13.50/hour	
Mow: 7-8'	Hour	35.00-	42.00	37.40		
9-10'	Hour	33.30-	45.00	38.83		
9-10'	Acre	—	—	10.00		
15-16'	Hour	43.50-	50.00	45.06	\$10.00/acre	
V-Mower	Hour	40.00-	50.00	43.75	\$9.00/acre	
Herbicide ^z (Strip/Band–Single Boom)	Hour	40.00-	41.50	40.75	Plus materials	
Herbicide ^z (Strip/Band–Single Boom)	Acre	13.75-	14.50	14.00	Plus materials	
Herbicide ^z (Strip/Band–Double Boom)	Acre	13.00-	15.50	14.13	Plus materials	
Herbicide ^z (Chemical Mow)	Acre	3.00-	3.50	3.25	Plus materials	
Temik ^z	Acre	12.50-	16.00	14.17	Plus materials	
Plow	Hour	34.00-	42.00	38.67		
Backhoe	Hour	40.00-	60.00	49.56		
Bush Hog	Hour	35.00-	40.00	36.67		
Middle Buster	Hour	40.00-	42.00	40.67	With tractor and driver	
Mound Builder	Hour	35.00-	42.00	39.07	With tractor and driver	
Grader Blade	Hour	33.00-	42.00	37.20	Tractor/blade and driver	
Water Truck with Driver	Hour	37.90	40.00	37.57		
Pickup Truck with Driver	Hour	31.75-	40.00	36.97	Average miles traveled per year: Pick-up truck – 25,000 miles	
Flatbed/Transport Truck with Driver	Hour	50.00-	80.00	66.25		
Tractor with Driver	Hour	31.25-	40.00	35.53		
ATV with Driver	Hour	22.00-	26.75	24.42		
SPRAYING:^z						
PTO AIR BLAST SPRAYER						
1,000 Gallon Tank with Electronic Sensing						
		Low	High	Average	500 Gallon Tank Average	
500 GPA	Acre	\$41.00-	45.00	42.25	40.67	
250 GPA	Acre	32.00-	39.00	36.19	34.58	
125 GPA	Acre	28.00-	35.00	31.06	30.38	
Aerial	Fixed Wing:	\$ 5.25/acre @ 5 gallons per acre				
Aerial	Fixed Wing:	\$ 7.25/acre @ 10 gallons per acre				
Aerial	Fixed Wing:	\$ 8.50/acre @ 15 gallons per acre				
Aerial	Fixed Wing:	\$12.50/acre @ 20 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	37.67	Tractor with irrigation pump	
Dry (Bulk)	Acre	8.00-	10.00	9.30	One reporting: \$69.00/hour	
Dry (Bulk) VRT Spreader		\$13.50/acre; \$150.00/hour				
Lime or Dolomite	Acre	7.50-	10.00	9.25	Average \$9.75/ton	
Fertilize Young Trees: ^z	Hand Spread	Hour	13.50-	21.75	16.22	Plus transportation and materials; 15¢/tree
	Fert. Spreader		Average: \$8.60/acre; \$36.00/hour		Plus materials	

Table 2. A listing of 2006 custom rates reported by fourteen 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-	\$49.00	\$ 44.67	
Water Furrow Disc	Hour	35.00-	50.00	40.50	
Water Furrow Cleaner	Hour	35.00-	42.00	37.50	
Water Furrow Shaper (Laser Control)	Hour	—	—	95.00	
Rotary Ditcher or Auger	Hour	35.00-	50.00	41.40	
Microsprinkler/Drip Irrigation Maintenance	Acre/Month	4.00-	5.50	4.75	Check & repair system; parts extra; Avg. \$39/hour
REMOVING TREES:					
Front-end Loader	Hour	\$50.00-	\$65.00	\$58.75	Avg. range 3-15 trees per hour
Tree Shearing (Cutting Tree at Ground Level)	Hour	60.00-	75.00	66.67	Avg. range 5-20 trees per hour
Prepare Site for Replanting	Tree	\$0.25 - \$1.00			
PRUNING:					
Hedging:					
Double Side (Tractor Mounted)	Hour	\$ —	\$ —	\$200.00	4 to 10 acres/hour
Double Side (Tractor Pulled)	Hour	—	—	165.00	4 to 10 acres/hour
Double Side (Self Propelled)	Hour	225.00-	280.00	251.67	8 to 20 A/H depending on wood size; \$15/A annual cut
Double Side Rotary (Self Propelled) ^x	Hour	—	—	280.00	5 to 15 A/H bed tops only; add 25% for furrows only
Topping:					
Double Sided Topper (Self Propelled)	Hour	—	—	280.00	Avg. 8-15 A depending on wood size type of cut; \$28/A
Double Side (Tractor Mounted)	Hour	—	—	200.00	
Topping Self Propelled	Hour	—	—	150.00	
Limb Lifter/Tree Skirt Trimmer	Acre	—	—	14.00	3 to 5 acres/hour
Limb Lifter/Tree Skirt Trimmer (Single Side)	Hour	—	—	77.50	
Limb Lifter/Tree Skirt Trimmer (Double Sided Rotary)	Hour	—	—	120.00	6 to 20 acres/hour
Removing Brush:					
Haul Brush out of Grove (Front-End Loader)	Hour	60.00-	70.00	65.00	Tractor & driver, trailer and 2 workers: \$70/hour
Mow/Chop Brush	Hour	40.00-	60.00	46.67	
OTHER CUSTOM RATES:					
Install Tree Wraps	20¢-60¢/tree depending on type of wrap and number of trees; Annual maintenance cost: 45¢/tree				
Plant Trees (Solid Set)	Tree	\$ 1.00-	\$ 2.25	\$ 1.44	Varies as to density
Plant Trees (Resets)	Tree	2.00-	2.50	2.15	Varies as to the number of resets
Grove Management Charge/Month:					
Supervising Grove Care Operations	Acre	4.00-	7.25	5.28	In addition to caretaking charges
Handling Fruit Marketing	\$0.05-\$0.25/box – For Supervising and Marketing fruit				
Supervising/Handling Chemicals/Fertilizer	5% to 15% of materials cost				
Charge for personnel to oversee harvesting operations and coordinate harvest in different blocks/groves and keeping of harvesting labor compliance records.	Box	\$ 0.05-	\$ 0.25	\$ 0.15	
Consulting	Hour	\$125.00-	\$175.00	\$150.00	Horticultural Evaluation and/or Financial Analysis/prospectus.
Total Reported Acreage Provided Grove Service to:	Acre	400-	7,000	2,384	Total acres reporting: 21,455

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.

^xLow 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 2006.