



Summary of 2005 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 February through April. 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 68,895 acres planted to citrus or 3,445 acres per caretaker. The Indian River-South Florida participants serviced 48,700 total acres or 4,870 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.

The itemized custom rates, expressed as the low and high rate reported, along with the average of the rates for the 2005 surveys are the most current available (Tables 1 and 2). During the past three years, more citrus caretakers have been reporting the use of **electronic sensing technology** as shown in the **spraying section** on the 2005 summary of the citrus caretaker custom rate charges. 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 2005 custom rates reported by twenty-five Ridge citrus caretakers

Grove Practice	Unit	Range of Rate Reported		Average Rate ^y	Comments		
CULTIVATION AND EQUIPMENT:							
Labor	Hour	\$10.50-	\$15.00	\$13.43	Plus transportation		
Mechanic Labor	Hour	25.00-	45.00	35.05	Includes truck		
Rotovate	Hour	30.00-	45.00	36.90			
Disc 7'	Hour	30.00-	40.00	33.78			
Disc 9'-10'	Hour	30.00-	40.00	33.22			
Disc 9'-10'	Acre	9.00-	11.00	10.08	One-way discing; Disc 7': \$8.77/acre		
Chop	Hour	30.00-	45.00	33.35			
Chop	Acre	7.50-	11.00	9.41			
Mow 5'-7'	Hour	31.10-	40.00	35.27			
Mow 9'-12'	Hour	34.90-	40.00	35.97			
Mow 5'-7'	Acre	8.00-	11.25	9.95			
Mow 9'-12'	Acre	8.00-	12.75	10.57			
Mow 15'-16'	Acre	10.00-	12.75	11.43			
Herbicide ^z (Strip/Band--Single Boom)	Hour	31.50-	35.00	33.50	Plus materials		
Herbicide ^z (Strip/Band--Single Boom)	Acre	12.00-	17.50	14.58	Plus materials		
Herbicide ^z (Strip/Band--Double Boom)	Acre	12.00-	15.50	14.00	Plus materials; Avg. \$40.16/hour		
Herbicide ^z (Chemical Mow)	Acre	6.00-	9.75	7.63	Plus materials		
Temik ^z	Acre	14.00-	16.00	14.95	Plus materials		
Plow	Hour	25.00-	35.00	31.25			
Deviner	Hour	—	—	42.00			
Bush Hog	Hour	32.50-	42.50	37.07	One reporting \$13.00/acre		
Backhoe	Hour	42.50-	75.00	49.50			
Pickup Truck with Driver	Hour	25.00-	35.00	28.99	Average miles/year/pickup: 23,400		
Pickup Truck w/out Driver	Hour	15.00-	20.00	18.73			
Flatbed Transport Truck with Driver	Hour	28.50-	50.00	36.65	Average miles/year: 24,803		
Low-Boy Transport	Hour	50.00-	65.00	55.00	Average miles/year: 30,000		
Tractor with Driver	Hour	27.00-	35.00	30.42			
Water/Supply Truck	Hour	28.00-	40.00	32.15			
ATV with Driver	Hour	20.00-	26.50	24.47			
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	—	—	40.00	28.00 -	36.00	32.25
250 GPA	Acre	29.00-	35.00	31.94	25.00 -	35.00	30.30
125 GPA	Acre	27.00-	33.00	28.49	22.50 -	27.00	24.15
100 GPA	Acre	24.00-	25.00	24.34	22.50 -	25.00	22.64
50 GPA	Acre	—	—	—	18.50 -	22.50	20.45
Aerial (Bell-47 Helicopter)		\$12.00 @ 5 GPA; \$16.50 @ 10 GPA; \$18.50 @ 15 GPA; \$25.00 @ 20 GPA					
FERTILIZE AND SOIL AMENDMENTS:^z							
Inject Liquid Fertilizer into Irrigation System	Hour	\$32.50-	\$50.00	\$37.36	Truck plus labor		
Inject Liquid Fertilizer into Irrigation System	Acre	1.75-	3.50	2.74	Average \$66.88/irrigation injection hookup		
Liquid Boom Application: Double Boom	Acre	14.75-	17.00	15.74			
Dry (Bulk)	Acre	7.00-	11.00	8.97			
Lime or Dolomite	Acre	8.50-	10.75	9.39			
Lime or Dolomite	Ton	7.50-	9.20	8.15			
Fertilize Young Trees: ^z Hand Spread	Hour	10.50-	15.00	13.43	Plus transportation and materials		
Fert. Spreader	Hour	30.00-	40.00	32.50	Plus materials; Average \$8.28/acre		
Airblast Spreader with Gator for Resets		\$30.00/hour; \$3.00/acre					
IRRIGATION:							
Microsprinkler		Avg. \$3.47/acre; Avg. \$37.50/month			Start/stop and supervision		
Microsprinkler	Hour	25.00-	35.00	28.88	Start/stop and supervision; truck and driver		
ATV with Driver	Hour	20.00-	26.50	24.47	Check/repair microsprinkler irrigation system-plus materials		
Ring Young Trees: Hand Labor	Hour	10.50-	15.00	13.43	Plus transportation		
Mechanical	Hour	25.00-	27.50	26.42	Labor and equipment		

(OVER)

Table 1.--A listing of 2005 custom rates reported by twenty-five 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	\$50.00-	\$70.00	\$61.25	Average trees sheared: 5 to 20 trees/hour
Front-end Loader	Hour	50.00-	65.00	57.63	Average trees removed: 5 to 15 trees/hour
Bulldozer	Hour	—	—	50.00	
Front-end Loader with Tree Spade	Hour	—	—	65.00	
PRUNING:					
Power Saw with Operator	Hour	\$17.00-	\$27.25	\$ 21.08	Plus transportation; Average \$7.00/hour without operator
Limb Lifter/Tree Skirt Trimmer (Double Sided)	Hour	—	—	180.00	Cover 8-12 acres one pass
Hedging:					
Double Side (Tractor Pulled)	Hour	85.00-	100.00	91.32	Cover 3-5 acres/hour
Double Side (Tractor Mounted)	Hour	—	—	280.00	
Single Side (Self Propelled)	Hour	65.00-	77.00	71.00	
Double Side (Self Propelled) ^x	Hour	330.00-	340.00	336.25	Cover 10-25 acres/hour depending on wood size
Double Side (Self Propelled) ^x	Hour	190.00-	250.00	216.67	Cover 4-12 acres/hour depending on wood size
Topping:					
Tractor Pulled	Hour	—	—	280.00	Cover 5-7 acres/hour
Tractor Pulled	Hour	—	—	105.00	Cover 1-3 acres/hour
Self Propelled	Hour	375.00-	418.00	396.50	Cover 5-10 acres/hr (Roof Top); 5-20 acres/hr (Flat Top)
Self Propelled	Hour	190.00-	250.00	230.00	
Removing Brush:					
Haul Brush out of Grove	Hour	32.50-	47.00	40.63	Tractor-trailer/truck; plus 2 people
Front-end Loader (Push Brush)	Hour	50.30-	65.00	58.43	2-10 acres/hour
Chop/Mow Brush	Hour	31.00-	47.25	36.62	3-6 acres/hour; Average \$11.63/acre
COLD PROTECTION:					
Mechanical (Bank and Unbank)	Hour	\$ —	\$ —	\$ 28.75	
Install Wraps	Each	0.35-	0.50	0.43	
Annual Maintenance Costs	Tree	0.30-	0.50	0.37	
OTHER CUSTOM RATES:					
Plant Resets	Per Tree	\$ 2.00-	\$ 3.00	\$ 2.55	Stake, plant and first watering
Solid Set Planting	Per Tree	1.50-	1.75	1.55	Stake, plant and first watering
Travel/Setup Charge	Hour	—	—	33.33	Average for those reporting
Grove Management Charge/Month:					
Supervising Grove Care Operations	Acre	2.00-	6.00	3.38	In addition to caretaking charges; One reporting 6% of
Handling Fruit Marketing	Box	0.10-	0.30	0.17	equipment labor charge
Supervising/Handling Chemicals/Fertilizer	15% to 25% of materials cost				
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 14¢/box			Note: One reporting adding a 5% fuel surcharge on all billed equipment charges.	
Consulting	Cultural Management/Horticultural Evaluation - \$50/hr to \$300/hr Financial Analysis Prospectus - \$100/hr to \$300/hr				
Total Reported Acreage Provided Grove Service to:	Acre	800-	15,603	3,445	Total acres reporting: 68,895

^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, July 2005.

Table 2.--A listing of 2005 custom rates reported by sixteen Indian River and South Florida citrus caretakers

Grove Practice	Unit	Range of Rate Reported		Average Rate ^y	Comments																									
CULTIVATION AND EQUIPMENT:																														
Labor	Hour	\$ 9.50-	\$17.50	\$13.56	Plus transportation and equipment																									
Mechanic Labor	Hour	30.00-	50.00	39.56	Labor and service truck																									
Rotovate	Hour	33.00-	40.00	37.75																										
Disc 7-8'	Hour	27.50-	38.50	33.00																										
Disc 10-12'	Hour	32.00-	40.00	35.84																										
Mow: 7-8'	Hour	27.50-	35.00	31.14																										
9-10'	Hour	31.00-	38.50	33.97																										
9-10'	Acre	9.00-	11.00	9.97																										
15-16'	Hour	35.00-	41.25	39.85	\$9.00/acre																									
V-Mower	Hour	33.00-	35.00	34.34																										
Herbicide ^z (Strip/Band--Single Boom)	Hour	30.00-	32.00	31.33	Plus materials																									
Herbicide ^z (Strip/Band--Single Boom)	Acre	13.00-	13.75	13.39	Plus materials; \$35.00/hour																									
Herbicide ^z (Strip/Band--Double Boom)	Acre	12.00-	14.00	12.75	Plus materials																									
Herbicide ^z (Chemical Mow)	Acre	2.50-	3.50	3.07	Plus materials																									
Temik ^z	Acre	10.50-	12.50	11.34	Plus materials																									
Plow	Hour	32.50-	38.50	34.67																										
Backhoe	Hour	45.00-	47.50	45.70																										
Middle Buster	Hour	—	—	38.50	With tractor and driver																									
Mound Builder	Hour	31.00-	38.50	34.84	With tractor and driver																									
Grader Blade	Hour	28.00-	38.50	33.60	Tractor/blade and driver																									
Water Truck with Driver	Hour	30.00-	35.00	32.75																										
Pickup Truck with Driver	Hour	28.00-	35.00	31.67	Average miles traveled per year: Pick-up truck – 21,298 miles																									
Flatbed/Transport Truck with Driver	Hour	35.00-	50.00	45.00																										
Tractor with Driver	Hour	28.00-	35.00	31.69																										
ATV with Driver	Hour	20.00-	25.00	23.25																										
SPRAYING:^z																														
PTO AIR BLAST SPRAYER																														
1,000 Gallon Tank with Electronic Sensing																														
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>Low</th> <th>High</th> <th>Average</th> <th>500 Gallon Tank</th> </tr> </thead> <tbody> <tr> <td>500 GPA</td> <td>—</td> <td>—</td> <td>38.00</td> <td>39.00</td> </tr> <tr> <td>250 GPA</td> <td>29.00-</td> <td>36.00</td> <td>32.92</td> <td>29.00</td> </tr> <tr> <td>125 GPA</td> <td>25.00-</td> <td>29.00</td> <td>28.03</td> <td>27.00</td> </tr> <tr> <td>Curtec (25 GPA)</td> <td>—</td> <td>—</td> <td>22.00</td> <td></td> </tr> </tbody> </table>							Low	High	Average	500 Gallon Tank	500 GPA	—	—	38.00	39.00	250 GPA	29.00-	36.00	32.92	29.00	125 GPA	25.00-	29.00	28.03	27.00	Curtec (25 GPA)	—	—	22.00	
	Low	High	Average	500 Gallon Tank																										
500 GPA	—	—	38.00	39.00																										
250 GPA	29.00-	36.00	32.92	29.00																										
125 GPA	25.00-	29.00	28.03	27.00																										
Curtec (25 GPA)	—	—	22.00																											
Aerial	Fixed Wing:	\$ 5.13/acre	@ 5 gallons per acre																											
Aerial	Fixed Wing:	\$ 7.17/acre	@ 10 gallons per acre		Bell Helicopter: \$20.00/acre @ 10 GPA																									
Aerial	Fixed Wing:	\$ 8.82/acre	@ 15 gallons per acre																											
Aerial	Fixed Wing:	\$11.25/acre	@ 20 gallons per acre																											
Hand Sprayer (500 gallon tank) with tractor and 2 workers – \$45.00/hour																														
FERTILIZING:^z																														
Liquid Boom Application: Double Boom	Acre	12.00-	13.40	12.55																										
Dry (Bulk)	Acre	7.00-	8.75	7.90	Average with VRT: \$10.38/acre																									
Lime or Dolomite	Acre	7.50-	8.75	7.90																										
Fertilize Young Trees: ^z Hand Spread	Hour	9.50-	17.50	13.56	Plus transportation and materials; 15¢/tree																									
Fert. Spreader	Average:	\$7.25/acre;	\$26.00/hour		Plus materials																									

(OVER)

Table 2.--A listing of 2005 custom rates reported by sixteen Indian River and South Florida citrus caretakers (cont'd.)

Grove Practice	Unit	Range of Rate Reported		Average Rate ^y	Comments
IRRIGATION:					
Ditch Mower	Hour	\$32.00-	\$44.50	\$ 36.20	
Water Furrow Disc	Hour	30.00-	38.50	34.67	
Water Furrow Cleaner	Hour	35.00-	38.50	36.34	
Water Furrow Shaper (Non-Laser Control)	Hour	—	—	65.00	
Water Furrow Shaper (Laser Control)	Hour	—	—	80.00	
Rotary Ditcher or Auger	Hour	33.00-	38.50	35.50	
Microsprinkler/Drip Irrigation Maintenance	Acre/Month	3.50-	4.75	4.25	Check & repair system; parts extra
REMOVING TREES:					
Front-end Loader	Hour	\$50.00-	\$65.00	\$56.79	Avg. range 3-15 trees per hour
Tree Shearing (Cutting Tree at Ground Level)	Hour	50.00-	65.00	56.25	Avg. range 5-20 trees per hour
Prepare Site for Replanting	Tree	\$0.25 - \$1.00			
PRUNING:					
Hedging:					
Single Side (Tractor Mounted)	Hour	\$ —	\$ —	\$ 55.00	
Double Side (Tractor Pulled)	Hour	—	—	65.00	
Double Side (Self Propelled)	Hour	250.00-	265.00	257.50	8 to 20 A/H depending on wood size; \$14/A annual cut
Double Side Rotary (Self Propelled) ^x	Hour	—	—	185.00	5 to 15 A/H bed tops only; add 25% for furrows only
Topping:					
Double Sided Topper (Self Propelled)	Hour	265.00-	285.00	275.00	Avg. 8-15 ac depending on wood size type of cut;\$30/acre
Topping Self Propelled	Hour	—	—	150.00	
Limb Lifter/Tree Skirt Trimmer	Acre	—	—	14.00	3 to 5 acres/hour
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	55.00-	65.00	59.25	
Mow/Chop Brush	Hour	32.00-	40.00	34.60	
OTHER CUSTOM RATES:					
Install Tree Wraps		15¢-50¢/tree depending on type of wrap and number of trees; Annual maintenance cost: 35¢/tree			
Plant Trees (Solid Set)	Tree	\$ 0.90-	\$ 1.75	\$ 1.32	Varies as to density
Plant Trees (Resets)	Tree	2.00-	2.50	2.17	Varies as to the number of resets
Travel/Setup Charge	Hour	—	—	22.62	
Grove Management Charge/Month:					
Supervising Grove Care Operations	Acre	3.00-	7.50	5.15	In addition to caretaking charges
Handling Fruit Marketing		\$0.10-\$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-	\$200.00	\$150.00	Horticultural Evaluation and/or Financial Analysis/prospectus.
Total Reported Acreage Provided Grove Service to:	Acre	1,000-	14,000	4,870	Total acres reporting: 48,700

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

^yCalculated 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, July 2005.