

## Summary of 2009 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 April through May, 2009. Twenty citrus caretakers participated in the Central Florida-Ridge area survey, while fifteen 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 60,182 acres planted to citrus or 3,344 acres per caretaker. The Indian River-South Florida participants serviced 53,580 total acres or 4,122 acres per caretaker. These acreages represent 24% and 18% of the total citrus acres in the two survey regions, respectively.

A majority of Indian River-South Florida growers perform 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 2009, 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 the Central Florida-Ridge citrus region.

The itemized custom rates, expressed as the low and high rate reported, along with the average of the rates for the 2009 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 2009 summary of the citrus caretaker custom rate charges. Unlike the 2008 production season where high fuel costs resulted in an 11% overall average increase in caretaker rates compared to 2007, the 2009 custom citrus caretaker rates showed very little change over the 2008 rates. 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](http://www.crec.ifas.ufl.edu/extension/economics)**

Table 1. A listing of 2009 custom rates reported by twenty Ridge citrus caretakers

Grove Practice	Unit	Range of Rate Reported		Average Rate <sup>y</sup>	Comments		
<b>CULTIVATION AND EQUIPMENT:</b>							
Labor	Hour	\$12.80-	\$20.00	\$15.08	Plus transportation		
Mechanic Labor	Hour	25.00-	35.00	32.41			
Mechanic Labor with Truck	Hour	39.50-	65.00	48.71			
Rotovate	Hour	40.00-	55.00	43.13			
Disc 7'	Hour	33.50-	40.00	36.50	Averaged \$12.25/acre		
Disc 9'-10'	Hour	34.00-	54.00	42.00			
Disc 9'-10'	Acre	10.00-	13.07	11.37	One-way discing		
Chop	Hour	33.50-	50.00	38.40	Averaged \$11.00/acre		
Mow 5'-7'	Hour	31.10-	40.00	35.62			
Mow 9'-12'	Hour	36.00-	42.00	38.22			
Mow 5'-7'	Acre	12.00-	14.00	12.88			
Mow 9'-12'	Acre	11.00-	14.00	12.56			
Mow 15'-16'	Acre	13.25-	14.00	13.69	Averaged \$40.00/hour		
Herbicide <sup>z</sup> (Strip/Band--Single Boom)	Acre	14.00-	21.00	15.77	Plus materials		
Herbicide <sup>z</sup> (Strip/Band--Double Boom)	Acre	12.50-	18.90	15.27	Plus materials		
Herbicide <sup>z</sup> (Chemical Mow)	Acre	3.50-	8.00	4.75	Plus materials		
Temik <sup>z</sup>	Acre	15.00-	20.00	16.40	Plus materials		
Plow	Hour	29.80-	40.00	35.33			
Deviner	Hour	30.00-	50.00	41.75			
Bush Hog	Hour	31.00-	50.00	42.08			
Backhoe	Hour	45.00-	55.00	49.82	One reporting Backhoe-Excavation: \$125.00/hour		
Pickup Truck with Driver	Hour	30.00-	48.00	37.20	One reporting \$25.00/day; Average miles/year: 27,133		
Flatbed Transport Truck with Driver	Hour	40.00-	85.00	59.17	Average miles/year: 33,660		
Tractor with Driver	Hour	29.00-	45.00	35.47			
Water/Supply Truck	Hour	33.25-	52.00	39.06			
ATV with Driver	Hour	22.50-	39.00	27.57			
<b>SPRAYING:<sup>z</sup></b>							
<b>PTO AIR BLAST SPRAYER</b>							
		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-	\$45.00	\$41.75	\$ —	\$ —	\$ —
250 GPA	Acre	30.00-	38.75	34.92	30.00-	40.00	34.96
150 GPA	Acre	26.00-	33.00	29.88	30.00-	35.00	31.80
125 GPA	Acre	25.00-	30.00	28.27	24.50-	32.50	27.13
100 GPA	Acre	22.00-	30.00	24.80	22.00-	27.00	24.89
Low Volume Psyllid Spray (every other middle)	Acre	5.00-	10.00	6.88			
<b>FERTILIZE AND SOIL AMENDMENTS:<sup>z</sup></b>							
Inject Liquid Fertilizer into Irrigation System	Hour	\$32.00-	\$40.00	\$37.66	Truck plus labor and plus materials		
Inject Liquid Fertilizer into Irrigation System	Acre	2.00-	5.00	3.13			
Dry (Bulk)	Acre	8.00-	12.00	9.79			
Dry (Bulk) VRT Spreader - Electronic Sensor	Acre	12.00-	13.50	12.38			
Lime or Dolomite	Acre	8.00-	12.00	10.35			
Lime or Dolomite	Ton	8.00-	12.50	10.13			
Fertilize Young Trees: <sup>z</sup> Hand Spread	Hour	12.80-	20.00	15.08	Plus transportation and materials		
Fert. Spreader	Hour	28.50-	40.00	35.88	Plus materials; Average \$10.88/acre		
Airblast Spreader with Gator for Resets		\$40.75/hour plus materials					
<b>IRRIGATION:</b>							
Microsprinkler	Hour	30.00-	38.00	33.44	Start/stop and supervision; truck and driver		
ATV with Driver	Hour	30.00-	35.00	32.00	Check/repair microsprinkler irrigation system-plus materials		

(OVER)

Table 1. A listing of 2009 custom rates reported by twenty Ridge citrus caretakers (cont'd.)

Grove Practice	Unit	Range of Rate Reported		Average Rate <sup>y</sup>	Comments
<b>REMOVING TREES:</b>					
Tree Shearing (Cutting Tree at Ground Level)	Hour	\$58.50-	\$75.00	\$66.22	Average trees sheared: 5 to 15 trees/hour
Front-end Loader	Hour	54.00-	85.00	65.95	Average trees removed: 5 to 15 trees/hour
Bulldozer	Hour	—	—	55.00	
<b>PRUNING:</b>					
Rehab or Freeze Damage Pruning – \$5.00/tree; Power Saw with Operator - Averaged \$21.43/hour					
Hedging:					
Single Side (Tractor Pulled)	Hour	\$ —	\$ —	\$ 77.00	
Double Side (Tractor Mounted)	Hour	175.00-	220.00	200.00	5 to 10 acres/hour
Double Side (Self Propelled)	Hour	265.00-	275.00	270.25	8 to 20 acres/hour depending on wood size
\$15/acre to \$21/acre annual cut depending on wood size					
Topping:					
Double Sided Topper (Self Propelled)	Hour	265.00-	300.00	280.00	Avg. 8-15 A depending on wood size type of cut; \$25/A
Double Sided (Tractor Mounted)	Hour	155.00-	231.00	197.75	
Double Sided (Tractor Pulled)	Hour	175.00-	235.00	205.00	Gable Cut
Limb Lifter/Tree Skirt Trimmer	Acre	20.00-	25.00	22.88	3 to 5 acres/hour
Limb Lifter/Tree Skirt Trimmer (Single Side)	Hour	65.00-	85.00	78.34	
Removing Brush:					
Haul Brush out of Grove	Hour	39.70-	55.00	44.40	Tractor-trailer plus 2 people
Front-end Loader (Push Brush)	Hour	54.00-	85.00	66.75	2-10 acres/hour
Chop/Mow Brush	Hour	35.75-	51.50	39.96	3-6 acres/hour; \$9.50/acre
<b>COLD PROTECTION:</b>					
Annual Maintenance Cost for Wraps	Tree	—	—	\$ 0.35	
Install Wraps	Each	0.30-	0.50	0.40	
<b>OTHER CUSTOM RATES:</b>					
Plant Resets	Per Tree	\$ 1.75-	\$ 2.50	\$ 2.07	Stake, plant and first watering
Solid Set Planting	Per Tree	1.00-	1.50	1.25	Stake, plant and first watering
Grove Management Charge/Month:					
Supervising Grove Care Operations	Acre	2.50-	6.00	3.32	In addition to caretaking charges; One reporting 6% of equipment labor charge
Handling Fruit Marketing	Box	0.05-	0.20	0.13	
Supervising/Handling Chemicals/Fertilizer	10% 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 17¢/box				<b>Note:</b> One reporting adding a 10% fuel surcharge on all billed equipment charges.
Total Reported Acreage Provided Grove Service to:	Acre	800-	12,500	3,344	Total acres reporting: 60,182

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

<sup>y</sup>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.

<sup>x</sup>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 2009.

Table 2. A listing of 2009 custom rates reported by fifteen Indian River and South Florida citrus caretakers

Grove Practice	Unit	Range of Rate Reported		Average Rate <sup>y</sup>	Comments	
<b>CULTIVATION AND EQUIPMENT:</b>						
Labor	Hour	\$ 13.50-	\$21.75	\$16.50	Plus transportation and equipment	
Mechanic Labor	Hour	36.00-	65.00	50.95	Labor and service truck	
Rotovate	Hour	40.00-	45.00	42.40		
Disc 7-8'	Hour	35.00-	40.00	38.33	One reporting \$10.00/acre	
Disc 10-12'	Hour	38.00-	50.00	42.58		
Mow: 7-8'	Hour	40.00-	46.00	42.58		
9-10'	Hour	33.00-	45.00	39.33	Average \$12.33/acre	
15-16'	Hour	38.00-	60.00	48.65		
15-16'	Acre	10.00-	15.00	12.12		
V-Mower	Acre	10.00-	13.00	11.40		
V-Mower	Hour	40.00-	50.00	46.25		
Herbicide <sup>z</sup> (Strip/Band–Single Boom)	Hour	38.00-	45.00	41.00	Plus materials; \$14.33/acre	
Herbicide <sup>z</sup> (Strip/Band–Double Boom)	Acre	13.00-	15.50	13.81	Plus materials	
Herbicide <sup>z</sup> (Chemical Mow)	Acre	3.50-	5.00	4.50	Plus materials	
Temik <sup>z</sup>	Acre	13.50-	17.50	14.87	Plus materials	
Plow	Hour	41.00-	50.00	43.66		
Backhoe	Hour	46.00-	63.00	52.68		
Bush Hog	Hour	40.00-	45.00	42.91		
Middle Buster	Hour	40.00-	50.00	43.59	With tractor and driver	
Mound Builder	Hour	40.00-	50.00	43.33	With tractor and driver	
Grader Blade	Hour	38.00-	45.00	42.50	Tractor/blade and driver	
Water Truck with Driver	Hour	35.00	42.00	38.60		
Pickup Truck with Driver	Hour	35.00-	50.00	39.00	Average miles traveled per year: 21,200 miles	
Flatbed/Transport Truck with Driver	Hour	65.00-	90.00	76.67		
Tractor with Driver	Hour	33.50-	45.00	37.15		
ATV with Driver	Hour	23.50-	30.00	25.33		
<b>SPRAYING:<sup>z</sup></b>						
		<b>PTO AIR BLAST SPRAYER</b>			<b>ENGINE DRIVEN AIR</b>	
		1,000 Gallon Tank			<b>BLAST SPRAYER</b>	
		with Electronic Sensing			500 Gallon Tank	
		Low	High	Average	Average	
500 GPA	Acre	\$40.00-	\$45.00	\$42.34	\$40.50	
250 GPA	Acre	32.00-	38.75	36.25	33.00	
125 GPA	Acre	25.00-	32.00	28.90	29.00	
100 GPA	Acre	24.00-	30.00	26.34		
Curtec (25 GPA)	Acre	24.00-	27.00	26.23		
		<b>PTO AIR BLAST SPRAYER</b>				
		1,000 Gallon Tank				
		without Electronic Sensing				
		Low	High	Average		
250 GPA	Acre	\$32.00-	\$42.00	\$36.31		
125 GPA	Acre	28.00-	37.00	31.92		
100 GPA	Acre	25.00-	30.00	27.00		
Low Volume Psyllid Spray (every other middle)	Acre	4.00-	10.00	6.75		
Aerial		Fixed Wing: \$7.50/acre @ 10 gallons/acre; \$8.50/acre @ 15 gallons/acre; \$10/acre @ 20 gallons/acre				
<b>FERTILIZING:<sup>z</sup></b>						
Inject Liquid Fertilizer into Irrigation System	Hour	\$32.00-	\$40.00	\$36.67	Tractor with irrigation pump	
Double Boom Liquid Fertilizer Application	Acre	—	—	13.75		
Dry (Bulk)	Acre	8.00-	11.00	9.34	Plus materials	
Dry (Bulk) VRT Spreader-Electronic Sensor	Acre	8.00-	13.50	10.08	Plus materials	
Lime or Dolomite	Acre	8.50-	10.50	9.00	Plus materials	
Fertilize Young Trees: <sup>z</sup>	Hand Spread	Hour	13.50-	21.75	16.50	Plus transportation and materials; 15¢/tree
	Hand Spread		One reporting \$30.00/hour (ATV John Deere Gator with Airspot Broadcaster) plus materials			
	Fert. Spreader		Average: \$7.38/acre; \$33.67/hour			Plus materials

(OVER)

Table 2. A listing of 2009 custom rates reported by fifteen Indian River and South Florida citrus caretakers (cont'd.)

Grove Practice	Unit	Range of Rate Reported		Average Rate <sup>2</sup>	Comments
<b>IRRIGATION:</b>					
Start/Stop, Supervise Irrigation System	Hour/Run	\$28.00-	\$40.00	\$34.60	Averaged \$4.75/acre/month
Ditch Mower	Hour	36.00-	45.00	42.39	
Water Furrow Disc	Hour	36.00-	50.00	43.00	
Water Furrow Cleaner	Hour	41.25-	45.00	42.31	
Water Furrow Shaper	Hour	63.00-	75.00	69.00	
Rotary Ditcher or Auger	Hour	40.00-	50.00	44.17	
Microsprinkler/Drip Irrigation Maintenance	Acre/Month	5.00-	7.00	5.63	Check & repair system; parts extra
<b>REMOVING TREES:</b>					
Front-end Loader	Hour	\$65.00-	\$85.00	\$69.17	Avg. range 10-20 trees per hour
Tree Shearing (Cutting Tree at Ground Level)	Hour	65.00-	85.00	72.50	Avg. range 5-15 trees per hour
Prepare Site for Replanting	Tree	\$0.25 - \$1.00			
<b>PRUNING:</b>					
Rehab or Freeze Damage Pruning – \$5.00/tree; Power Saw with Operator - Averaged \$21.43/hour					
<b>Hedging:</b>					
Single Side (Tractor Pulled)	Hour	\$ —	\$ —	\$ 77.00	
Double Side (Tractor Mounted)	Hour	175.00-	220.00	200.00	5 to 10 acres/hour
Double Side (Self Propelled)	Hour	265.00-	275.00	270.25	8 to 20 acres/hour depending on wood size \$15/acre to \$21/acre annual cut depending on wood size
<b>Topping:</b>					
Double Sided Topper (Self Propelled)	Hour	265.00-	300.00	280.00	Avg. 8-15 A depending on wood size type of cut; \$25/A
Double Sided (Tractor Mounted)	Hour	155.00-	231.00	197.75	
Double Sided (Tractor Pulled)	Hour	175.00-	235.00	205.00	Gable Cut
Limb Lifter/Tree Skirt Trimmer	Acre	20.00-	25.00	22.88	3 to 5 acres/hour
Limb Lifter/Tree Skirt Trimmer (Single Side)	Hour	65.00-	85.00	78.34	
<b>Removing Brush:</b>					
Haul Brush out of Grove (Front-End Loader)	Hour	60.00-	85.00	68.60	Tractor & driver, trailer and 2 workers: \$63.67/hour
Mow/Chop Brush	Hour	35.75-	50.00	41.25	Averaged \$12.38/acre
<b>OTHER CUSTOM RATES:</b>					
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	\$ 1.20-	\$ 1.45	\$ 1.32	Varies as to density
Plant Trees (Resets)	Tree	2.00-	2.50	2.29	Varies as to the number of resets
<b>Grove Management Charge/Month:</b>					
Supervising Grove Care Operations	Acre	3.50-	9.00	5.40	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	600-	14,000	4,122	Total acres reporting: 53,580

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

<sup>3</sup>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.

\*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 2009.