ONTARIO FARM INPUT MONITORING PROJECT SURVEY # 2 – October 4, 2023 ECONOMICS AND BUSINESS GROUP, RIDGETOWN CAMPUS - U of G

Background

The Ontario Farm Input Monitoring Project is a survey of farm supply stores to collect cash retail prices that commercial farmers pay, when purchasing bulk fuels, fertilizers, and pesticides. Prices are collected on 45 farm inputs from 8 centres in Ontario, 3 in Michigan, 1 in Ohio and 1 in Indiana. Enumerators obtained current pricing from a minimum of 3 retail outlets in their assigned centre using the pre-designed survey form.

Results

(i) Ontario Prices

This is the second survey for 2023. On October 4, 2023, the Canadian dollar was lower than the U.S. dollar (1 C =\$0.7276 US).

Fuel prices showed that Regular Unleaded Gasoline prices averaged \$1.40 per litre, Diesel Fuel (coloured) averaged \$1.60 per litre and Propane (farm dryer) prices averaged \$0.67 per litre.

Fertilizer prices showed Urea prices ranging from \$695 to \$1,122 a tonne with an average price of \$911. Nitrogen Solution (UAN) 28% prices ranged from \$395 to \$870 with an average price of \$611 per tonne. Mono-Ammonium Phosphate prices varied from \$865 to \$1,315 per tonne with an average price of \$949. Muriate of Potash prices averaged \$746 per tonne with a range from \$625 to \$1,020.

With respect to pesticide prices, 2,4-D Amine prices ranged from \$10.40 to \$15.40 per litre with an average of \$13.51. Callisto prices ranged from \$107.45 to \$141.00 per litre. Roundup WeatherMAX prices averaged \$10.11 per litre while Dual II Magnum prices averaged \$41.05 per litre and Pursuit averaged \$151.00 per litre. Sencor prices averaged \$69.76 per kilogram. The price for Halex GT ranged from \$17.50 to \$21.10 with an average of \$19.72 per litre. Prowl H20 prices averaged \$18.13 per litre. Coragen prices ranged from \$179.42 to \$228.50 per litre. Miravis Ace averaged \$63.64 per litre.

Ontario product prices when compared to October 5, 2022 showed that fuel prices on average were down 2%, fertilizer prices were down 24% on average, and pesticide prices were up 8%. The Canadian dollar was down less than \$0.01 or 1% relative to the U.S. dollar from a year ago.

Since the previous survey on May 3, 2023, changes in average prices showed that the fuel products group was up 7% and the fertilizer products group was down 18%. Pesticide products as a group were down 1%. The Canadian dollar was down less than \$0.01 or 1% relative to the U.S. dollar.

(ii) Comparison Between Ontario and Nearby U.S. States

Some of the products <u>higher</u> priced in Ontario include: Regular Unleaded Gasoline +25%; Diesel Fuel (coloured) +20%; Nitrogen Solution (UAN) 28% +15%; Atrazine +40%; Callisto +10%; Classic +38%; Dual II Magnum +17%; Pursuit +13%; and Sencor +25%.

Products <u>lower</u> priced in Ontario include: Mono-Ammonium Phosphate -20%; Muriate of Potash 60% -4%; Acuron -33%; Halex GT -22%; MCPA Amine 500 -13%; Prowl -9%; XtendiMax -24%; Delegate -23%; Delaro Complete -43%; and Miravis Ace -24%.

The exact implications at the farm level of this variability between Ontario and the U.S. for farm inputs depends greatly on individual producer product selections and purchase timing.

Appreciation is extended to Agriculture & Agri-Food Canada for funding this project.

ONTARIO/U.S. FARM INPUT MONITORING PROJECT SURVEY # 2 – October 4, 2023 ECONOMICS AND BUSINESS SECTION, RIDGETOWN CAMPUS - U OF G

Background

The Ontario/U.S. Farm Input Monitoring Project is a survey of farm supply stores to collect cash retail prices that commercial farmers pay, when purchasing bulk fuels, fertilizers, and pesticides. Prices are collected on 45 farm inputs from 8 centres in Ontario, 3 in Michigan, 1 in Ohio and 1 in Indiana. Enumerators obtained current pricing from a minimum of 3 retail outlets in their assigned centre using the pre-designed survey form.

Results

(i) U.S. Prices

This is the second survey for 2023. On October 4, 2023, the Canadian dollar was lower than the U.S. dollar (1 C =\$0.7276 US).

Fuel prices showed that Regular Unleaded Gasoline prices averaged \$3.08 per gallon, Diesel Fuel (farm) averaged \$3.67 per gallon and Propane (farm dryer) prices averaged \$1.61 per gallon.

Fertilizer prices showed Urea prices ranging from \$545 to \$670 a ton with an average price of \$604. Nitrogen Solution (UAN) 28% prices averaged \$352 per ton. Mono-Ammonium Phosphate prices ranged from \$750 to \$850 with an average price of \$786 per ton. Muriate of Potash prices averaged \$511 per ton with a range from \$428 to \$625.

With respect to pesticide prices, Atrazine prices ranged from \$20.87 to \$30.64 per gallon with an average of \$25.95. Halex GT prices averaged \$70.07 per gallon while Dual II Magnum averaged \$96.85 per gallon. Prowl H20 prices ranged from \$30.00 to \$67.50 per gallon. The price for Miravis Ace varied from \$170.58 to \$275.00 with an average price of \$230.47 per gallon. Warrior II prices ranged from \$267.10 to \$449.66 per gallon.

U.S. product prices when compared to October 5, 2022, showed that fuel prices on average were down 20%, fertilizer prices were down 31% on average, and pesticide prices on average were up 8%. The Canadian dollar was down less than \$0.01 or 1% relative to the U.S. dollar from a year ago.

Since the previous survey on May 3, 2023, changes in average prices showed that the fuel products group was down 2%, the fertilizer products as a group were down 12% and the pesticide products as a group were up 2%. The Canadian dollar was down less than \$0.01 or 1% relative to the U.S. dollar.

(ii) Comparison Between Ontario and Nearby U.S. States

Some of the products <u>higher</u> priced in Ontario include: Regular Unleaded Gasoline +25%; Diesel Fuel (coloured) +20%; Nitrogen Solution (UAN) 28% +15%; Atrazine +40%; Callisto +10%; Classic +38%; Dual II Magnum +17%; Pursuit +13%; and Sencor +25%.

Products <u>lower</u> priced in Ontario include: Mono-Ammonium Phosphate -20%; Muriate of Potash 60% -4%; Acuron -33%; Halex GT -22%; MCPA Amine 500 -13%; Prowl -9%; XtendiMax -24%; Delegate -23%; Delaro Complete -43%; and Miravis Ace -24%.

The exact implications at the farm level of this variability between Ontario and the U.S. for farm inputs depends greatly on individual producer product selections and purchase timing.

DATA COLLECTION METHODOLOGY

Survey Details		
Sample size	-	Approximately 24 Ontario and 15 U.S. retail outlets were surveyed.
Method	-	The fertilizer and pesticide prices were obtained by personal visits to a cross section of outlet stores. Petroleum prices were collected by a combination of both personal visit and phone.
Locations	-	Refers to geographic trading areas.
Terms and Con	diti	ons
Price	-	The price collected was defined as the cash retail price an average commercial farmer would pay when purchasing a minimum amount of fuel, fertilizer, and pesticide.
Volume	-	Price reductions due to large volumes, bulk purchases, special memberships, or yearend sales incentives were not considered. Price quotes were for cash and carry.
Services	-	All additional services i.e. delivery, testing or application, were excluded from the price quote.
Levy	-	The Canadian container recycling levy was not subtracted from the Canadian price.
Petroleum	-	In Ontario the fuel tank and pump is assumed to be owned by the fuel supplier while in the U.S. the tank and pump is owned by the farmer.
Price Comparis	ons	
Exchange	-	The October 4, 2023 daily average rate for the Bank of Canada was used. i.e. \$1.3744 Canadian equals \$1 U.S. (or \$0.7276 U.S. equals \$1 Canadian)
Average	-	The arithmetic average of all price quotes for each geographic centre was calculated.
Conversion	-	U.S. prices were converted to their Canadian equivalent by adjusting for exchange rate, measure, and concentration.
Values	-	For mixing cost, \$.01 designates no charge.
GST	-	Where applicable, GST was excluded from the input cost.

Price Comparison in Canadian Dollars Between Ontario and Nearby American States for Oct 04, 2023

		ALL OF	IT. LOCAT	IONS	ALL U.S. LOCATIONS		
ONTARIO PRODUCT	UNIT	MIN	МАХ	AVG	MIN MAX AVG		
Regular Unleaded Gasoline	LITRE	1.32	1.54	1.40	0.97 1.35 1.12		
Diesel Fuel (coloured)	LITRE	1.48	1.98	1.60	1.27 1.39 1.33		
Propane (farm dryer)	LITRE	0.54	0.94	0.67	0.54 0.65 0.58		
Anhydrous Ammonia 82-0-0 (no servic	TONNE				984.75 1060.50 1022.63		
Jrea 46%	TONNE	695.00	1122.00	911.45	825.68 1015.05 915.25		
litrogen Solution (UAN) 28%	TONNE	395.00	870.00	610.98	386.33 628.73 533.28		
Iono-Ammonium Phosphate 11-52-0	TONNE	865.00	1315.00	948.78	1136.25 1287.75 1190.36		
Di-Ammonium Phosphate 18-46-0	TONNE				1030.20 1158.98 1081.33		
riple Superphosphate 0-46-0	TONNE						
Auriate of Potash 60%	TONNE	625.00	1020.00	745.83	648.42 946.88 774.44		
iquid 6-24-6	TONNE	1045.00	1545.00	1305.23	1743.01 1743.01 1743.01		
iquid 10-34-0	TONNE	960.00	1273.00	1152.43	901.43 1302.90 1134.48		
/ixing Charge (no GST or PST)	TONNE	12.50	30.00	16.70	9.09 22.73 18.18		
2,4-D Amine 600 (564 g/l EC)	LITRE	10.40	15.40	13.51	9.08 14.21 13.02		
Accent 75 DF (75 DF)	GRAM	1.97	4.91	2.66	1.25 1.26 1.25		
Acuron (71. g, 28.5 g, 257, 120 g/L)	LITRE	17.79	21.22	19.80	22.77 33.95 29.36		
Atrazine 480 (480 g/l SU)	LITRE	11.76	14.04	13.20	7.58 11.13 9.42		
Authority Supreme (2@250 g/L, SC)	LITRE	129.75	153.75	145.82	165.35 237.91 192.28		
Basagran (480 g/l SN)	LITRE	31.80	41.00	38.06	22.26 35.04 30.26		
Callisto 480 SC (480 g/L SC)	LITRE	107.45	141.00	120.27	50.84 144.76 109.62		
Classic (25% WG)	GRAM	0.68	1.99	1.29	0.62 1.11 0.94		
Dual II Magnum (915 g/l EC)	LITRE	37.61	44.00	41.05	22.57 42.89 35.17		
Frontier MAX (720 g/L EC)	LITRE	42.25	78.98	70.78			
Halex GT (2 @ 250 g/L, 1 @ 25 g/L)	LITRE	17.50	21.10	19.72	20.00 28.66 25.44		
ntegrity (68 g/L, 600 g/L EC)	LITRE	61.67	78.70	72.86	54.96 103.29 72.17		
/CPA Amine 500 (500 g/l SN)	LITRE	10.30	18.57	14.25	13.64 18.65 16.47		
Pardner (280 g/l EC)	LITRE	19.00	27.00	24.79	25.56 113.91 44.54		
Prowl H2O (455 g/L EC)	LITRE	15.33	20.73	18.13	10.89 24.51 19.90		
Pursuit (240 g/l SN)	LITRE	118.18	168.91	151.00	102.98 189.03 133.97		
Reflex (240 g/L EC)	LITRE	50.42	59.25	56.13	21.32 25.59 23.43		
Roundup WeatherMAX (540 g/l SN)	LITRE	7.50	14.99	10.11	9.06 18.06 13.80		
Sencor 75 DF (75% WG)	KILOG	59.25	76.00	69.76	42.42 99.38 55.68		
(tendiMax 350 g/L SN	LITRE	17.58	30.50	21.37	22.49 32.28 28.25		
Coragen (200 g/L SU)	LITRE	179.42	228.50	212.12	310.31 469.23 399.64		
Delegate (25% WG)	GRAM	0.39	0.69	0.46	0.53 0.65 0.60		
Aalathion 500 EC (500 g/l EC)	LITRE	17.00	34.00	30.22	12.73 34.85 25.42		
Matador 120EC (120 g/L EC)	LITRE	177.25	203.84	192.74	46.69 78.60 63.74		
Pounce (384 g/L EC)	LITRE	58.75	95.00	65.14	7.40 44.00 31.92		
Sevin XLR+ (480 g/l Ll)	LITRE	32.40	52.80	41.52	26.10 32.50 29.97		
Bravo (500 g/l SC)	LITRE	16.60	20.10	18.01	7.16 12.25 10.06		
Caramba (90 g/L LI)	LITRE	35.19	51.10	47.65	27.60 64.35 51.34		
Delaro Complete (176.2g, 154g, 128.3	LITRE	63.50	97.05	89.27	113.39 194.15 156.00		
/iravis Ace (150 g/L, 125 g/L)	LITRE	54.20	67.66	63.64	61.94 99.86 83.69		
Nova 40 W (40% WP)	KILOG	276.78	310.71	298.20	161.92 206.04 194.04		
- / /							
Prosaro Pro (1@200 g, 2@100g/L SU)	LITRE	66.72	82.37	77.72	34.21 121.80 96.35		

PRICE COMPARISON BETWEEN ONTARIO AND NEARBY AMERICAN STATES FOR OCTOBER 4, 2023 AVERAGE ONTARIO/U.S. PRICE IN CDN DOLLARS AND PERCENT DIFFERENCE

		AVERAGE ONTARIO	AVERAGE U.S.	ONTARIO	ONTARIO 2023 VS
ONTARIO PRODUCT	UNIT	PRICE	PRICE	VS U.S.	ON 2022
Regular Unleaded Gasoline	LITRE	1.40	1.12	24.9%	-2.3%
Diesel Fuel (coloured)	LITRE	1.60	1.33	20.1%	-0.1%
Propane (farm dryer)	LITRE	0.67	0.58	14.5%	-5.1%
Anhydrous Ammonia 82-0-0 (no service)	TONNE		1,022.63		
Urea 46%	TONNE	911.45	915.25	-0.4%	-28.4%
Nitrogen Solution (UAN) 28%	TONNE	610.98	533.28	14.6%	-28.2%
Mono-Ammonium Phosphate 11-52-0	TONNE	948.78	1,190.36	-20.3%	-30.8%
Di-Ammonium Phosphate 18-46-0	TONNE		1,081.33		
Triple Superphosphate 0-46-0	TONNE				
Muriate of Potash 60%	TONNE	745.83	774.44	-3.7%	-33.2%
Liquid 6-24-6	TONNE	1,305.23	1,743.01	-25.1%	-9.3%
Liquid 10-34-0	TONNE	1,152.43	1,134.48	1.6%	-16.4%
Mixing Charge (no GST or PST)	TONNE	16.70	18.18	-8.2%	-4.0%
2,4-D Amine 600 (564 g/l EC)	LITRE	13.51	13.02	3.7%	9.2%
Accent 75 DF (75 DF)	GRAM	2.66	1.25	112.1%	15.1%
Acuron (71. g, 28.5 g, 257, 120 g/L)	LITRE	19.80	29.36	-32.6%	
Atrazine 480 (480 g/l SU)	LITRE	13.20	9.42	40.1%	11.0%
Authority Supreme (2@250 g/L, SC)	LITRE	145.82	192.28	-24.2%	
Basagran (480 g/l SN)	LITRE	38.06	30.26	25.8%	12.1%
Callisto 480 SC (480 g/L SC)	LITRE	120.27	109.62	9.7%	8.0%
Classic (25% WG)	GRAM	1.29	0.94	38.3%	-0.5%
Dual II Magnum (915 g/l EC)	LITRE	41.05	35.17	16.7%	5.8%
Frontier MAX (720 g/L EC)	LITRE	70.78			9.3%
Halex GT (2 @ 250 g/L, 1 @ 25 g/L)	LITRE	19.72	25.44	-22.5%	7.2%
Integrity (68 g/L, 600 g/L EC)	LITRE	72.86	72.17	1.0%	
MCPA Amine 500 (500 g/l SN)	LITRE	14.25	16.47	-13.5%	25.9%
Pardner (280 g/l EC)	LITRE	24.79	44.54	-44.3%	11.8%
Prowl H2O (455 g/L EC)	LITRE	18.13	19.90	-8.9%	11.5%
Pursuit (240 g/l SN)	LITRE	151.00	133.97	12.7%	9.1%
Reflex (240 g/L EC)	LITRE	56.13	23.43	139.6%	7.8%
Roundup WeatherMAX (540 g/l SN)	LITRE	10.11	13.80	-26.7%	-43.1%
Sencor 75 DF (75% WG)	KILOG	69.76	55.68	25.3%	7.7%
XtendiMax 350 g/L SN	LITRE	21.37	28.25	-24.4%	12.9%
Coragen (200 g/L SU)	LITRE	212.12	399.64	-46.9%	7.9%
Delegate (25% WG)	GRAM	0.46	0.60	-23.4%	8.4%
Malathion 500 EC (500 g/l EC)	LITRE	30.22	25.42	18.9%	12.6%
Matador 120EC (120 g/L EC)	LITRE	192.74	63.74	202.4%	9.8%
Pounce (384 g/L EC)	LITRE	65.14	31.92	104.1%	4.5%
Sevin XLR+ (480 g/l LI)	LITRE	41.52	29.97	38.6%	31.9%
Bravo (500 g/l SC)	LITRE	18.01	10.06	79.0%	6.0%
Caramba (90 g/L LI)	LITRE	47.65	51.34	-7.2%	2.0%
Delaro Complete (176.2g, 154g, 128.3g	LITRE	89.27	156.00	-42.8%	
Miravis Ace (150 g/L, 125 g/L)	LITRE	63.64	83.69	-24.0%	5.6%
Nova 40 W (40% WP)	KILOG	298.20	194.04	53.7%	2.4%
Prosaro Pro (1@200 g, 2@100g/L SU)	LITRE	77.72	96.35	-19.3%	
Ethrel (240 g/l LI)	LITRE	24.54	9.81	150.2%	7.3%

Exchange Rate: 1.3744

Seed Pricing (October 4, 2023)

Exchange Rate: 1.3744

		Ontario (\$CAD)				U.S. (\$CAD)	Ontario vs. U.S.	
Commodity	Unit	MIN	MAX	AVG	MIN	MAX	AVG	AVG
Wheat	22.7 kg	31.75	45.00	34.49	27.49	49.26	35.58	-3.1%
Corn RR	80,000 seeds	295.00	405.00	364.67	364.22	530.52	425.41	-14.3%
Corn Conventional	80,000 seeds	215.00	346.00	259.16	272.13	384.83	346.36	-25.2%
Soybean RR	140,000 seeds	62.05	102.00	83.98	68.72	114.35	83.97	0.0%
Soybean Conventional	22.7 kg	38.45	99.00	62.58	64.60	103.79	76.71	-18.4%

	U.S. (\$USD)			0	ntario (\$US	U.S. vs. Ontario		
Commodity	Unit	MIN	MAX	AVG	MIN	MAX	AVG	AVG
Wheat	50 lb	20.00	35.84	25.89	23.10	32.74	25.09	3.1%
Corn RR	80,000 seeds	265.00	386.00	309.52	214.64	294.67	265.33	14.3%
Corn Conventional	80,000 seeds	198.00	280.00	252.01	156.43	251.75	188.56	25.2%
Soybean RR	140,000 seeds	50.00	83.20	61.09	45.15	74.21	61.10	0.0%
Soybean Conventional	50 lb	47.00	75.52	55.81	27.98	72.03	45.53	18.4%

Note: The price collected was defined as the cash retail price that a commercial farmer would pay when purchasing a minimum amount of seed. Seed varieties vary by location.