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With wheat prices in the low \$3 range, and 2017 July futures suggesting sub-\$4 new crop prices, Oklahoma producers are looking for an alternative winter crop. Winter canola may provide a more economically attractive crop. Additionally, there are several agronomic benefits to rotating canola with wheat including a 10 to 15 percent wheat yield bump following canola.

Historically, Oklahoma canola prices have ranged from \$1.16 to \$5.15 more than wheat prices and average \$3.68 more than wheat price. However, since 2013, canola prices have ranged from \$1.16 to \$3.15 more than wheat prices, suggesting weakening basis for canola. Average state canola yields have ranged from 12 bushels in 2014 to 31 bushels in 2010. USDA National Agricultural Statistics Service has not published the 2015-2016 crop yields yet; however 2016 canola yields are expected to top the 2010 yield. Since 2009, canola yields average 3 bushels less than average state wheat yields.

Budgets for canola and wheat were recently prepared to compute breakeven prices for both crops. Starting with canola and a yield goal of 30 bushels (1,500 pounds), a producer can expect to invest about \$210 per acre for seed, chemical, fuel, fertilizer, harvest and hauling costs. Realized yields will vary, relative to the yield goal. In Table 1, the top row of yields represent realized yields and the left column are prices and returns to land, labor and management in the body of the table. If a producer harvests 30 bushels of canola, the breakeven price is \$7.01 per bushel (bottom row). At 35 bushels harvested, canola breakeven drops to \$6.07. Given that 2017 canola prices contract are around \$6.25 to \$6.50, positive returns are possible if above average yields are realized. Losses ramp up quickly when yields fail to reach Oklahoma Cooperative Extension Fact Sheets are also available on our website at: http://osufacts.okstate.edu

goals. It also important to note these breakeven prices do not consider the positive impact on wheat yields for one to two years after canola.

Oklahoma wheat returns for 2017 are less favorable. For a wheat yield of 33 bushels (three bushels more than the canola yield goal in the example above), a producer can expect to spend around \$165 per acre on seed, chemical, fuel, fertilizer, harvest and hauling costs. If the goal of 33 bushels is realized, the breakeven price is \$5.01 per bushel. Futures markets suggest a price of about \$3.75 for July 2017 wheat. At \$3.75, a producer would need about 46 bushels of harvest wheat to break even when fertilizing for a 33-bushel yield. At this point, \$5 wheat price for 2017 is well outside most forecast ranges, making wheat very unattractive. Table 2 reports returns to land, labor and management when fertilizing for 33 bushels and various combinations of realized yields and prices. Positive returns to land, labor and management are only realized for the cells in the lower right-hand corner. These breakeven prices are computed for grain-only wheat. There may be positive returns to wheat stockers in 2016-2017, but producers should consider price risk management to avoid large stock return losses.

In summary, winter crops returns will be tight in 2016-2017, but it appears that canola is more likely than wheat to generate positive returns to land, labor and management. Since individual producer costs will vary, producers should consider their own costs and revenue projections before making planting decisions. Producers are encouraged to contact their local Extension educator for more information on canola and wheat budgets.

Fertilizer for 30 bu					Canola Yield (actual)					
Seed, fert, chem,		10	15	20	25	30	35	40	45	50
fuel, harv cost		\$ 203	\$ 204	\$ 206	\$ 208	\$ 210	\$ 212	\$ 215	\$ 217	\$ 219
Price	\$ 6.00	-\$143	-\$114	-\$86	-\$58	-\$30	- <mark>\$2</mark>	\$25	\$53	\$81
	\$ 6.50	-\$138	-\$107	-\$76	-\$45	-\$15	\$15	\$45	\$75	\$106
	\$ 7.00	-\$133	-\$99	-\$66	-\$33	\$0	\$33	\$65	\$98	\$131
	\$ 7.50	-\$128	-\$92	-\$56	-\$20	\$15	\$50	\$85	\$120	\$156
Breakeven \$		\$ 20.30	\$ 13.62	\$ 10.28	\$ 8.31	\$ 7.01	\$ 6.07	\$ 5.37	\$ 4.82	\$ 4.39

Table 2. Wheat 2017 Returns to Land, Labor and Management.

Fertilize for 33 bu				Wheat Yield (actual)						
Seed, fert, chem, fuel, harv cost		13 \$ 158	18 \$ 160	23 \$ 161	28 \$ 163	33 \$ 165	38 \$ 167	43 \$ 169	48 \$ 171	53 \$ 173
Price	\$ 3.00	-\$119	-\$106	-\$92	-\$79	-\$66	-\$53	-\$40	-\$27	-\$14
	\$ 3.50	-\$112	-\$97	-\$81	-\$65	-\$50	-\$34	-\$19	-\$3	\$13
	\$ 4.00	-\$106	-\$88	-\$69	-\$51	-\$33	-\$15	\$3	\$21	\$39
	\$ 4.50	-\$99	-\$79	-\$58	-\$37	-\$17	\$4	\$24	\$45	\$66
Breakeven \$		\$ 12.13	\$ 8.86	\$ 7.02	\$ 5.83	\$ 5.01	\$ 4.40	\$ 3.93	\$ 3.56	\$ 3.26

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