

# Economics – Can Oilseeds Improve the Bottom Line in a Cereal Rotation?



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Farmers and economists have historically conducted single crop net return comparisons of substituting alternative crops for traditional crops. Rotational enterprise budgeting tools have been constructed to help farmers understand a more complete economic impact of alternative crops in the context of the whole rotation. Benefits accrue in crops following canola, impacting total farm returns through increased yields, and net farm returns via input costs. There are immediate economic impacts in the year canola is grown and in years later in a rotation. Not accounted for by these budgets are the impacts that incorporating canola has on soil health and quality, rotational weed control, and the environment.

Enterprise budgets have been developed for the Low and Intermediate Rainfall areas, and are in the development phase for the High Rainfall Zones, which include expanded features that allow for canola’s rotational impacts. These interactive computer tools are available on-line and can be used to assess the on-farm economics of growing canola. Due to the dramatic changes in crop prices and input prices, all prices in the budgets posted on the WSU Oilseeds site (<http://css.wsu.edu/oilseeds/>) are being updated.

Each enterprise budget file includes separate tabs for summary, crop calendars, crop budget sheets (differentiated by rotation), and machinery complements and costs. The summary tab presented below (based on 2017 crop prices) provides detailed, interactive summary economic information useful in comparing alternative crops and rotations with and without canola.

**Table 1. Summary of Average Annual Returns by Crop (\$/acre)**

By Crop:	Unit	Yield per acre	Price per unit	Revenue per acre (\$/acre)	Variable Costs (VC) (\$/acre)	Fixed Costs (FC) (\$/acre)	Total Cost (TC) of Operation (\$/acre)	Returns over VC (\$/acre)	Returns over TC (\$/acre)
<b>Oilseed Rotation: Fallow--Winter Wheat--Spring Canola</b>									
Soft White Winter Wheat (SWWW) <i>Preceding fallow year costs*</i>	bu	78	\$4.68	\$365 \$0	\$161 \$109	\$259 \$27	\$421 \$136	\$204 -\$109	-\$56 -\$136
Hard Red Winter Wheat (HRWW) <i>Preceding fallow year costs*</i>	bu	73	\$4.81	\$351 \$0	\$159 \$116	\$260 \$27	\$419 \$143	\$192 -\$116	-\$68 -\$143
Spring Canola (SC)	lb	1500	\$0.15	\$225	\$198	\$81	\$279	\$27	-\$54
<b>Cereal Rotation: Fallow--Winter Wheat--Spring Barley/Spring Wheat</b>									
Soft White Winter Wheat (SWWW) <i>Preceding fallow year costs*</i>	bu	78	\$4.68	\$365 \$0	\$161 \$109	\$259 \$27	\$421 \$136	\$204 -\$109	-\$56 -\$136
Hard Red Winter Wheat (HRWW) <i>Preceding fallow year costs*</i>	bu	73	\$4.81	\$351 \$0	\$164 \$116	\$260 \$27	\$424 \$143	\$187 -\$116	-\$73 -\$143
Soft White Spring Wheat (SWSW)	bu	50	\$4.83	\$242	\$177	\$96	\$273	\$64	-\$32
Dark Northern Spring Wheat (DNS)	bu	45	\$6.63	\$298	\$186	\$116	\$301	\$113	-\$3
Spring Barley (SB)	ton	1.50	\$120	\$180	\$164	\$76	\$239	\$16	-\$59

**Table 2. Summary of Average Annual Returns by Rotation (\$/acre)**

Click on the rotations below (red text) to select and compare alternative rotations from the drop down menu.

Select the Rotation:	Budget(s):	Revenue per acre (\$/acre)	Variable Costs (VC) (\$/acre)	Fixed Costs (FC) (\$/acre)	Total Cost (TC) of Operation (\$/acre)	Returns over VC (\$/acre)	Returns over TC (\$/acre)
<b>F-SWWW-SC</b>	1 and 3	\$197	\$120	\$114	\$233	\$77	-\$37
<b>F-SWWW-SB</b>	4 and 8	\$182	\$108	\$112	\$220	\$73	-\$38