

## EWS Farms

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**EWS Farms** is representative of an irrigated and dryland farming operation in Northeastern Colorado. Irrigated corn, dryland corn, and dryland wheat are the three enterprises on this farm. Production practices, costs of production, market prices, production yields, and other information are based on data from the region in order to provide a realistic setting. The probabilities of risk events were also calculated using actual data where available. Slight modifications were sometimes made to maintain the workability and realism of the game.

The farm includes 500 irrigated acres and 2,000 dryland acres raising 750 acres of dryland wheat and 500 acres of dryland corn annually in a three year rotation. Irrigated corn is grown on the remaining 500 irrigated acres. Production costs for the three enterprises include direct cash costs to the operation excluding factor payments to land, generally calculated as a percentage return to land value. These costs include the cash labor, maintenance and replacement costs associated with a typical operation of this size. Average expected yields for the three enterprises are 35 bu/acre (Dryland Wheat), 50 bu/acre (Dryland Corn), and 200 bu/acre (Irrigated Corn) resulting in a total expected yield of 26,250 bushels of wheat and 125,000 bushels of corn to be marketed each year.

Each year, the farm chooses from three options to market their grain crops: 1) Forward contract (Corn/Wheat) to the elevator for harvest delivery; 2) Hedge (Corn/Wheat) against the (December Corn/September Wheat) futures contracts for harvest settlement; 3) sell all grain inventory at the harvest cash price.

### Dryland Wheat Production

Crop Acres	750
Average Annual Yield	35 Bushels per Acre
Production Costs	\$96.77 per Acre
Average Market Price	\$2.98 per Bushel
Average Yearly Production	26,250 Bushels
Annual Government Payment	\$13,677

### Dryland Corn Production

Crop Acres	500
Average Annual Yield	50 Bushels per Acre
Production Costs	\$113.50 per Acre
Average Market Price	\$2.25 per Bushel
Average Yearly Production	25,000 Bushels
Annual Government Payment	\$8,017

### Irrigated Corn Production

Crop Acres	500
Average Annual Yield	200 Bushels per Acre
Production Costs	\$352.00 per Acre
Average Market Price	\$2.25 per Bushel
Average Yearly Production	100,000 Bushels
Annual Government Payment	\$16,811

Taking all of the above information into account, the farm expects to sell 125,000 bushels of corn and 26,250 bushels of wheat each year. Total revenues would equal net sales of \$318,920 (after subtracting the landlord's share on leased ground) and \$39,505 in government payments. Total farm operating expenses would total \$329,274 leaving a total return to land of \$29,151.

<b>Expected Annual Net Farm Income</b>			
<u>Expected Revenues</u>		<u>Expected Expenses</u>	
Wheat	26,250 Bushels = \$78,225	Wheat	750 Acres = \$72,578
Dryland Corn	25,000 Bushels = \$56,250	Dryland Corn	500 Acres = \$56,750
Irrigated Corn	100,000 Bushels = \$225,000	Irrigated Corn	500 Acres = \$176,000
Lease Payments	-\$39,555	Cost share	-\$32,760
Gov't Payments	\$39,505	Other costs	\$56,706
Annual total:	\$358,425	Annual total:	\$329,274
<b>Return to Land = \$29,151</b>			

## DECISIONS

Period 1	Risk and Probability of Occurrence	Impact
	<u>Ending Stocks Report</u> High Medium Low	<ul style="list-style-type: none"> <li>Wheat prices will decrease with a higher than expected ending stocks report.</li> <li>Wheat prices will stay relatively unchanged with an ending stocks report at or near normal or expected.</li> <li>Wheat prices will increase with a lower than expected ending stocks report.</li> </ul>
	<b>Risk Management Strategy Decisions</b>	
	<p><b>Decision 1: Forward Contract Wheat</b>                      You have the opportunity to forward contract all or part of your expected production of winter wheat at the posted contract price for harvest delivery. Keep in mind that actual production may differ from expected. Contracts not filled by actual production will be settled by buying grain at harvest at the cash market price.</p> <p><b>Decision 2: Hedge Wheat</b>                      A hedge may be placed against the posted September Kansas City Wheat Futures price in 5,000 bushel increments. A "round-turn" commission of \$50 per contract will be charged to your account for this transaction. Basis at harvest (Cash - Futures) may be stronger or weaker than expected causing the realized price to differ from the expected market price. Variation in actual production from expected may cause you to be over hedged in poor production years.</p>	

Period 2	Risk and Probability of Occurrence	Impact
	<u>Wheat Seedings Report</u> High Medium Low  ***** <u>Prospective Plantings</u> High Medium Low	<ul style="list-style-type: none"> <li>• Wheat prices will decrease with a higher than expected reported planted acreage.</li> <li>• Wheat prices will remain relatively unchanged with an average wheat seedings report.</li> <li>• Wheat prices will dramatically increase with a significantly smaller than expected planted acreage report.</li> </ul> ***** <ul style="list-style-type: none"> <li>• Corn prices will decrease with a higher than expected prospective plantings report.</li> <li>• Corn prices will remain relatively steady with an average prospective plantings report.</li> <li>• Corn prices will dramatically increase with a significantly smaller than expected prospective plantings report.</li> </ul>
<b>Risk Management Strategy Decisions</b>		
<p>Decision 3: Forward Contract Wheat  You have the opportunity to forward contract all or part of your expected production of winter wheat at the posted contract price for harvest delivery. Keep in mind that actual production may differ from expected. Contracts not filled by actual production will be settled by buying grain at harvest at the cash market price.</p> <p>Decision 4: Hedge Wheat  A hedge may be placed against the posted September Kansas City Wheat Futures price in 5,000 bushel increments. A “round-turn” commission of \$50 per contract will be charged to your account for this transaction. Basis at harvest (Cash - Futures) may be stronger or weaker than expected causing the realized price to differ from the expected market price. Variation in actual production from expected may cause you to be over hedged in poor production years.</p> <p>Decision 5: Forward Contract Corn  You have the opportunity to forward contract all or part of your expected production of corn at the posted contract price for harvest delivery. Keep in mind that actual production may differ from expected. Contracts not filled by actual production will be settled by buying grain at harvest at the cash market price.</p> <p>Decision 6: Hedge Corn  A hedge may be placed against the posted December Corn futures contract in 5,000 bushel increments. A “round-turn” commission of \$50 per contract will be charged to your account for this transaction. Basis at harvest (Cash - Futures) may be stronger or weaker than expected causing the realized price to differ from the expected market price. Variation in actual production from expected may cause you to be over hedged in poor production years.</p>		

Period 3	Risk and Probability of Occurrence	Impact
	<p><u>Crop Progress Report</u> Excellent Good Poor</p> <p>*****</p> <p><u>Cattle on Feed</u> Far Below Expectations In Line with Expectations Much Greater than Expected</p>	<ul style="list-style-type: none"> <li>•Wheat prices will decrease with a better than expected crop progress report.</li> <li>•Wheat prices will remain relatively unchanged with a crop progress report in line with expectations.</li> <li>•Wheat prices will dramatically increase with a poorer than expected crop progress report.</li> </ul> <p>*****</p> <ul style="list-style-type: none"> <li>•Corn prices will decrease with a higher than expected cattle on feed report because of decreased corn demand.</li> <li>•Corn prices will remain relatively steady with an average cattle on feed report.</li> <li>•Corn prices will dramatically increase with a significantly smaller than expected cattle on feed report.</li> </ul>
<b>Risk Management Strategy Decisions</b>		
<p>Decision 7: Forward Contract Wheat You have the opportunity to forward contract all or part of your expected production of winter wheat at the posted contract price for harvest delivery. Keep in mind that actual production may differ from expected. Contracts not filled by actual production will be settled by buying grain at harvest at the cash market price.</p> <p>Decision 8: Hedge Wheat A hedge may be placed against the posted September Kansas City Wheat Futures price in 5,000 bushel increments. A “round-turn” commission of \$50 per contract will be charged to your account for this transaction. Basis at harvest (Cash - Futures) may be stronger or weaker than expected causing the realized price to differ from the expected market price. Variation in actual production from expected may cause you to be over hedged in poor production years.</p> <p>Decision 9: Forward Contract Corn You have the opportunity to forward contract all or part of your expected production of corn at the posted contract price for harvest delivery. Keep in mind that actual production may differ from expected. Contracts not filled by actual production will be settled by buying grain at harvest at the cash market price.</p> <p>Decision 10: Hedge Corn A hedge may be placed against the posted December Corn futures contract in 5,000 bushel increments. A “round-turn” commission of \$50 per contract will be charged to your account for this transaction. Basis at harvest (Cash - Futures) may be stronger or weaker than expected causing the realized price to differ from the expected market price. Variation in actual production from expected may cause you to be over hedged in poor production years.</p>		

Period 4	Risk and Probability of Occurrence	Impact
	<u>Crop Progress Report</u> Excellent Good Poor	<ul style="list-style-type: none"> <li>• Corn prices will decrease with a better than expected crop progress report.</li> <li>• Corn prices will remain relatively unchanged with a crop progress report in line with expectations.</li> <li>• Corn prices will dramatically increase with a poorer than expected crop progress report.</li> </ul>
<b>Risk Management Strategy Decisions</b>		
	<p>Decision 11: Forward Contract Corn            You have the opportunity to forward contract all or part of your expected production of corn at the posted contract price for harvest delivery. Keep in mind that actual production may differ from expected. Contracts not filled by actual production will be settled by buying grain at harvest at the cash market price.</p> <p>Decision 12: Hedge Corn            A hedge may be placed against the posted December Corn futures contract in 5,000 bushel increments. A “round-turn” commission of \$50 per contract will be charged to your account for this transaction. Basis at harvest (Cash - Futures) may be stronger or weaker than expected causing the realized price to differ from the expected market price. Variation in actual production from expected may cause you to be over hedged in poor production years.</p>	
<b>Game End</b>		



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