

Date: Nov-01-2023

The following pages represent a single crop budget but at 3 levels of detail and for 3 planning yield levels

Abstract level budget - The most summarized version of a budget. (e.g., a single line represents all fertilizer costs)

Summary level budget - A more detailed crop budget. (e.g., Fertilizer is broken out into N, P, K)

Detailed level budget - All the detail for producing a crop. (e.g., The specific fertilizers are listed).

Middle yield - The basic crop budget for a region and crop.

A detailed, summary, and abstract level budget are included for the middle yield.

Low and High yield - Budgets based on the middle yield but with a lower/higher yield goal (and irrigation level).

These high and low yield level budgets only include the abstract level budgets.

The 2 tables below are sensitivity tables that show the returns over direct costs and the returns over total costs

The tables have the basic budget price in the middle column

On either side of the base price are potential prices 5% and 10% above and below this base price

TABLE 1. RETURNS OVER DIRECT COSTS

		Prices					
		\$211.50	\$223.25	\$235.00	\$246.75	\$258.50	
		=====					
	3.1 II	\$563	\$599	\$636	\$672	\$709	Low yield
Yields	3.6 II	\$543	\$585	\$627	\$669	\$712	Middle yield
	4.1 II	\$755	\$804	\$852	\$900	\$948	High yield

TABLE 2. RETURNS OVER TOTAL COSTS

		Prices					
		\$211.50	\$223.25	\$235.00	\$246.75	\$258.50	
		=====					
	3.1 II	\$478	\$514	\$551	\$587	\$624	Low yield
Yields	3.6 II	\$458	\$500	\$542	\$584	\$627	Middle yield
	4.1 II	\$670	\$719	\$767	\$815	\$863	High yield

2024 Alfalfa Cost-Return Budget in Northwest Kansas

----- MIDDLE YIELDS

Gregg Ibendahl, Daniel O'Brien, Sarah Lancaster, and Lucas Haag

Budget abstract

Date: Nov-01-2023

item	unit	price	quantity	amount	Sub-total	your farm
INCOME						
Product						
Alfalfa - Northwest KS	ton	\$235.00	3.60	\$846.00	\$846.00	_____

--TOTAL INCOME--					\$846.00	_____
DIRECT EXPENSES						
Additional labor					\$0.47	_____
Custom Operations					\$112.22	_____
Diesel					\$3.61	_____
Fertilizers					\$40.00	_____
Herbicides					\$1.74	_____
Insecticides					\$14.49	_____
Miscellaneous					\$6.65	_____
Operator labor					\$1.75	_____
Repair & Maintenance					\$3.31	_____
Seeds					\$26.25	_____
Interest on operating capital			8% percent on direct expenses		\$8.42	_____

--TOTAL DIRECT EXPENSES--					\$218.90	
-----Total direct expenses per ton					\$60.81	
FIXED EXPENSES						
Cash rent					\$71.00	_____
Capital recovery (depreciation + interest)					\$13.96	_____

--TOTAL FIXED EXPENSES--					\$84.96	
-----Total expenses per ton					\$84.41	
RETURNS ABOVE DIRECT EXPENSES					\$627.10	
RETURNS ABOVE TOTAL SPECIFIED EXPENSES					\$542.14	

2024 Alfalfa Cost-Return Budget in Northwest Kansas

----- MIDDLE YIELDS

Summary page(s)

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Date: Nov-01-2023

item	unit	price	quantity	amount	Sub-total	your farm
INCOME						
Product						
Alfalfa - Northwest KS	ton	\$235.00	3.60	\$846.00	\$846.00	_____
					\$846.00	_____
--TOTAL INCOME--						
DIRECT EXPENSES						
Additional labor						
Fertilizer application				\$0.14		
Planting				\$0.20		
Spraying				\$0.13	\$0.47	_____
Custom Operations						
Hay				\$112.22	\$112.22	_____
Diesel						
Fertilizer application				\$0.84		
Planting				\$0.60		
Spraying				\$1.08		
Tillage				\$1.09	\$3.61	_____
Fertilizers						
Nitrogen	lbs	\$0.63	11.00	\$6.93		
Phosphorus	lbs	\$0.64	52.00	\$33.07		
Potassium	lbs	\$0.00	0.00	\$0.00		
Lime	lbs	\$0.00	0.00	\$0.00	\$40.00	_____
Herbicides						
-----				\$1.74	\$1.74	_____
Insecticides						
-----				\$14.49	\$14.49	_____
Miscellaneous						
-----				\$6.65	\$6.65	_____
Operator labor						
Fertilizer application				\$0.44		
Planting				\$0.31		
Spraying				\$0.42		
Tillage				\$0.57	\$1.75	_____
Repair & Maintenance						
Fertilizer application				\$1.43		
Planting				\$0.68		
Spraying				\$0.46		
Tillage				\$0.74	\$3.31	_____
Seeds						
-----				\$26.25	\$26.25	_____
Interest on operating capital			8% percent on direct expenses	\$8.42	\$8.42	_____
--TOTAL DIRECT EXPENSES--					\$218.90	
-----Total direct expenses per ton \$60.81						
FIXED EXPENSES						
Cash rent				\$71.00	\$71.00	_____
Capital recovery (depreciation + interest)						

2024 Alfalfa Cost-Return Budget in Northwest Kansas

----- MIDDLE YIELDS

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Summary page(s)

Date: Nov-01-2023

item	unit	price	quantity	amount	Sub-total	your farm
Fertilizer application -----				\$3.68		
Planting -----				\$2.29		
Spraying -----				\$3.59		
Tillage -----				\$4.40	\$13.96	_____
--TOTAL FIXED EXPENSES--					\$84.96	
-----Total expenses per ton \$84.41						
RETURNS ABOVE DIRECT EXPENSES					\$627.10	
RETURNS ABOVE TOTAL SPECIFIED EXPENSES					\$542.14	

2024 Alfalfa Cost-Return Budget in Northwest Kansas

----- - MIDDLE YIELDS

Detailed budget page(s)

Gregg Ibendahl, Daniel O'Brien, Sarah Lancaster, and Lucas Haag

Date: Nov-01-2023

item	unit	price	quantity	amount	Sub-total	your farm
INCOME						
Product						
Alfalfa - Northwest KS	ton	\$235.00	3.60	\$846.00	\$846.00	_____
Other						
Govt payments, indemnity payments, etc.						_____

--TOTAL INCOME--					\$846.00	_____
DIRECT EXPENSES						
Additional labor						
Fertilizer application						
Nutrient applicator_60 ft with Tractor(200-249hp)CB	hour	\$15.00	0.01	\$0.14		
Planting						
NT Grain Drill_30' with Tractor(200-249hp)CB	hour	\$15.00	0.01	\$0.20		
Spraying						
Sprayer 1200+gal_120' 300hp with Sprayer 1200+gal	hour	\$15.00	0.01	\$0.13	\$0.47	_____
Custom Operations						
Hay						
Baling - Large Round Bales, over 1,500 lb without net	bale	\$13.83	3.60	\$49.81		
Side Raking	acre	\$5.77	3.00	\$17.31		
Swathing and Conditioning	acre	\$15.03	3.00	\$45.10	\$112.22	_____
Diesel						
Fertilizer application						
Nutrient applicator_60 ft with Tractor(200-249hp)CB	gal	\$3.95	0.21	\$0.84		
Planting						
NT Grain Drill_30' with Tractor(200-249hp)CB	gal	\$3.95	0.15	\$0.60		
Spraying						
Sprayer 1200+gal_120' 300hp with Sprayer 1200+gal	gal	\$3.95	0.27	\$1.08		
Tillage						
Field Cultivate Fld_50' with Tractor(200-249hp)CB	gal	\$3.95	0.28	\$1.09	\$3.61	_____
Fertilizers						

MAP (11-52-0)	lb	\$0.40	100.00	\$40.00	\$40.00	_____
						--- ACTUAL POUNDS - 11 lb - N, 52 lb - P, 0 lb - K
Herbicides						

Karmex DF	lb	\$5.11	0.34	\$1.74	\$1.74	_____
Insecticides						

Lorsban 4E	pt	\$7.25	2.00	\$14.49	\$14.49	_____
Miscellaneous						

Alfalfa_NW_Dry	acre	\$6.65	1.00	\$6.65	\$6.65	_____
Operator labor						
Fertilizer application						
Nutrient applicator_60 ft with Tractor(200-249hp)CB	hour	\$20.00	0.02	\$0.44		
Planting						
NT Grain Drill_30' with Tractor(200-249hp)CB	hour	\$20.00	0.02	\$0.31		
Spraying						
Sprayer 1200+gal_120' 300hp with Sprayer 1200+gal	hour	\$20.00	0.02	\$0.42		
Tillage						
Field Cultivate Fld_50' with Tractor(200-249hp)CB	hour	\$20.00	0.03	\$0.57	\$1.75	_____

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----- MIDDLE YIELDS

Detailed budget page(s)

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Date: Nov-01-2023

item	unit	price	quantity	amount	Sub-total	your farm
Repair & Maintenance						
Fertilizer application						
Nutrient applicator_60 ft with Tractor(200-249hp)CB	Hour	\$77.85	0.02	\$1.43		
Planting						
NT Grain Drill_30' with Tractor(200-249hp)CB	Hour	\$10.34	0.07	\$0.68		
Spraying						
Sprayer 1200+gal_120' 300hp with Sprayer 1200+gal	Hour	\$52.39	0.01	\$0.46		
Tillage						
Field Cultivate Fld_50' with Tractor(200-249hp)CB	Hour	\$24.86	0.03	\$0.74	\$3.31	_____
Seeds						

Alfalfa - Roundup Ready	lb	\$8.75	3.00	\$26.25	\$26.25	_____
Interest on operating capital	8% percent on direct expenses			\$8.42	\$8.42	_____
--TOTAL DIRECT EXPENSES--					\$218.90	
-----Total direct expenses per ton \$60.81						
FIXED EXPENSES						
Cash rent						

All crops_NW_Dry	acre	\$71.00	1.00	\$71.00	\$71.00	_____
Capital recovery (depreciation + interest)						
Fertilizer application						
Nutrient applicator_60 ft with Tractor(200-249hp)CB	Hour	\$200.66	0.02	\$3.68		
Planting						
NT Grain Drill_30' with Tractor(200-249hp)CB	Hour	\$34.93	0.07	\$2.29		
Spraying						
Sprayer 1200+gal_120' 300hp with Sprayer 1200+gal	Hour	\$407.44	0.01	\$3.59		
Tillage						
Field Cultivate Fld_50' with Tractor(200-249hp)CB	Hour	\$147.42	0.03	\$4.40	\$13.96	_____
--TOTAL FIXED EXPENSES--					\$84.96	
-----Total expenses per ton \$84.41						
RETURNS ABOVE DIRECT EXPENSES					\$627.10	
RETURNS ABOVE TOTAL SPECIFIED EXPENSES					\$542.14	

2024 Alfalfa Cost-Return Budget in Northwest Kansas

----- - LOW YIELDS

Gregg Ibendahl, Daniel O'Brien, Sarah Lancaster, and Lucas Haag

Budget abstract

Date: Nov-01-2023

item	unit	price	quantity	amount	Sub-total	your farm
INCOME						
Product						
Alfalfa - Northwest KS	ton	\$235.00	3.10	\$728.50	\$728.50	_____

--TOTAL INCOME--					\$728.50	_____
DIRECT EXPENSES						
Additional labor					\$0.47	_____
Custom Operations					\$0.00	_____
Diesel					\$3.61	_____
Fertilizers					\$34.44	_____
Herbicides					\$1.74	_____
Insecticides					\$14.49	_____
Miscellaneous					\$6.65	_____
Operator labor					\$1.75	_____
Repair & Maintenance					\$3.31	_____
Seeds					\$22.60	_____
Interest on operating capital			8% percent on direct expenses		\$3.56	_____

--TOTAL DIRECT EXPENSES--					\$92.63	
-----Total direct expenses per ton						\$29.88
FIXED EXPENSES						
Cash rent					\$71.00	_____
Capital recovery (depreciation + interest)					\$13.96	_____

--TOTAL FIXED EXPENSES--					\$84.96	
-----Total expenses per ton						\$57.29
RETURNS ABOVE DIRECT EXPENSES					\$635.87	
RETURNS ABOVE TOTAL SPECIFIED EXPENSES					\$550.92	

2024 Alfalfa Cost-Return Budget in Northwest Kansas

----- - HIGH YIELDS

Gregg Ibendahl, Daniel O'Brien, Sarah Lancaster, and Lucas Haag

Budget abstract

Date: Nov-01-2023

item	unit	price	quantity	amount	Sub-total	your farm
INCOME						
Product						
Alfalfa - Northwest KS	ton	\$235.00	4.10	\$963.50	\$963.50	_____

--TOTAL INCOME--					\$963.50	_____
DIRECT EXPENSES						
Additional labor					\$0.47	_____
Custom Operations					\$0.00	_____
Diesel					\$3.61	_____
Fertilizers					\$45.56	_____
Herbicides					\$1.74	_____
Insecticides					\$14.49	_____
Miscellaneous					\$6.65	_____
Operator labor					\$1.75	_____
Repair & Maintenance					\$3.31	_____
Seeds					\$29.90	_____
Interest on operating capital			8% percent on direct expenses		\$4.30	_____

--TOTAL DIRECT EXPENSES--					\$111.76	
-----Total direct expenses per ton \$27.26						
FIXED EXPENSES						
Cash rent					\$71.00	_____
Capital recovery (depreciation + interest)					\$13.96	_____

--TOTAL FIXED EXPENSES--					\$84.96	
-----Total expenses per ton \$47.98						
RETURNS ABOVE DIRECT EXPENSES					\$851.74	
RETURNS ABOVE TOTAL SPECIFIED EXPENSES					\$766.78	