

CROP ENTERPRISE

B U D G E T



ORGANIC DRYLAND WINTER WHEAT/FALLOW ROTATION, GOSHEN COUNTY, WYOMING

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This crop budget is for a representative organic dryland wheat/fallow operation in southeast Wyoming. A wheat/fallow rotation is typical for dryland farming in southeast Wyoming. The budget shows the costs associated with 2 acres (wheat production and fallowed land). Operations and values used in this budget represent the best estimates from multiple sources in southeast Wyoming and the Nebraska Panhandle, including University of Nebraska state crop budgets (Klein et al., 2017a; Klein et al., 2017b). University of Minnesota machinery cost estimates were used to establish use-related and total power use costs (Lazarus, 2015).

Many different wheat varieties are planted to dryland acres in Wyoming. Buckskin variety has historically been the most popular wheat variety seeded in the state, although recently acreage has dropped and other varieties, including Pronghorn and Goodstreak, have increased. These varieties, and their corresponding historical yields, are included in this budget. Another wheat variety, Cowboy, has seen an increase in acreage, but it still fairly new (USDA-NASS, 2017b).

Land

This budget assumes the land base is owned by the producer. Real estate opportunity cost is assumed to be 4 percent per acre. Real estate taxes are assumed to be 1 percent per acre. The per-acre land value is estimated as the average value of irrigated cropland in the state, according to the most current Wyoming Agricultural Statistics Service survey (USDA-NASS, 2017a).

Labor

This budget assumes labor is provided by the landowner at \$25 per hour for all field operations except the custom application of fertilizer, assumed at \$6.50 per acre by a chemical supply company or \$3.96 per acre if done by landowner.

Capital

Interest on operating capital is included at 5.5 percent. This percentage represents interest paid to a lending institution on loaned capital. Interest is charged on operating capital for cash expenses for a 6-month time period. This percentage should be adjusted based on the individual producer's situation.

Field Operations

The enterprise budget is based on an assumed yield of 30 bushels per acre. This budget is also based on a one crop in two years assumption. No crop insurance is assumed for this budget, but there are various options available. Planting occurs in September, with a 20-foot, no-till disk. No fertilizer applications were considered, although compost is sometimes used in organic production. Harvest occurs in July using a 20-foot wheat head. The fallow land is cultivated three times from May to June to control weeds with a land finisher or disk. Per-acre,



EXTENSION

Organic Dryland Winter Wheat/Fallow, Southeast Wyoming, 2017

Organic Wheat/Fallow Rotation, 30 bushel/acre goal
 (1 year organic wheat, 1 year fallow)

ORGANIC WHEAT

	Use-Related Cost/Acre	Total Cost/Acre
Field Operations		
Drill	\$11.00	\$13.95
Combine Dryland	\$29.16	\$34.07
Truck		
Total Field Operations	\$40.16	\$48.02

Materials and Services	Type	Rate	Unit	Per unit Price	Total
Seed	Wheat Goodstreak	\$60.00	lbs	\$0.27	\$16.20
Hauling Grain	Custom	30	bushel	\$0.12	\$3.60
Total Materials and Services					\$19.80
Total Operations, Materials and Services					\$67.82

FALLOW

	Use-Related Cost/Acre	Total Cost/Acre
Field Operations		
Disk	\$8.92	\$11.33
Land Finisher	\$4.87	\$6.24
Land Finisher	\$4.87	\$6.24
Land Finisher	\$4.87	\$6.24
Undercut stubble	\$11.16	\$14.07
Total Fallow Field Operations	\$34.69	\$44.12

Materials and Services	Type	Rate	Unit	Per Unit Price	Total
Fallow production Cost/Acre					\$44.12
Total Field Operations					\$92.14
Listed Operations, Materials. and Services					\$111.94
Total Interest on Operating Capital	5.50% for 6 months	5.50%		\$94.65	\$5.21
Total Operations, Materials, and Services					\$117.15

Overhead Field	Insurance, Vehicles, Office				\$20.00
Real Estate Opportunity Cost	Dryland	\$770.00	acre	4.00%	\$30.80
Real Estate Taxes		\$770.00	acre	1.00%	\$7.70
Overhead Fallow	Insurance, Vehicles, Office				\$20.00
Real Estate Opportunity Cost	Dryland	\$770.00	acre	4.00%	\$30.80
Real Estate Taxes		\$770.00	acre	1.00%	\$7.70
Total Overhead					\$117.00
Total Cost Including Overhead					\$234.15
Cost per Bushel					\$7.80
Cash Cost per Bushel					\$3.84

use-related, and total cost for implements, with associated power units, are averaged over all sizes by implement type in the operation portion of the budget. Using this approach encapsulates all possible tractor types and horsepower sizes.

Sources:

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Lazarus, William F. 2015. "Machinery Cost Estimates." University of Minnesota Extension, St. Paul, MN. <http://www3.extension.umn.edu/sites/default/files/download/Machinery%20Cost%20Estimates%20June%202015.pdf>

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