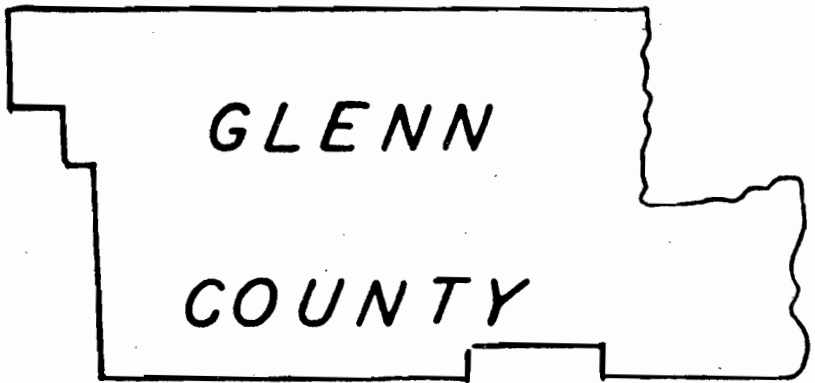


IRRIGATED

BARLEY OR WHEAT

PRODUCTION COSTS



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EQUIPMENT AND BUILDING LIST

Item	<u>Original Cost</u>		Years Life	Annual Use (acres)	<u>Non-Cash Overhead</u>	
	Total	Per Acre			Depre- ciation	Interest at 6%
Crawler Tractor 60 HP - Diesel	\$20,000	\$31.25	20	640	\$1.57	\$.94
Wheel Tractor 50 HP - Diesel	8,850	13.83	15	640	.93	.42
Plow, 4-16 one-way hydraulic	1,670	5.22	15	320	.35	.16
Disk, offset - 15 ft.	2,400	3.75	15	640	.25	.12
Border Disk	325	1.02	15	320	.07	.03
Blade - 3 point	300	.94	15	320	.07	.03
Spiketooth - 20 ft.	650	1.02	15	640	.07	.04
Drill - 12 ft.	2,000	6.25	15	320	.42	.19
Combine (used) - 14 ft.	8,000	25.00	10	320	2.50	.75
Truck (used) - 2 ton	1,500	2.35	10	640	.24	.08
Pickup	3,000	4.69	8	640	.59	.15
Buildings	3,000	4.69	30	640	.16	.15
Tools	1,500	2.35	15	640	.16	.08
TOTALS	\$53,195	\$102.36			\$7.38	\$3.14

SAMPLE COSTS TO PRODUCE IRRIGATED BARLEY OR WHEAT IN GLENN COUNTY

YIELD: 4,000 cwt. YEAR 1969

Operation	Hours Per Acre	Cash and Labor Costs Per Acre			Total Materials	Total	Your Cost Per Acre
		Labor	Fuel & Repair	Description of Materials			
Cultural Costs							
Plow 1x or stubble disk (2x)	.50	\$1.25	\$1.76			\$3.01	
Fertilize				Contract 80N @ 10¢ + 1.00 application	\$9.00	9.00	
Disk, offset 1x	.25	.63	.98			1.61	
Prepare & Fill in Borders	.10	.25	.17			.42	
Drill	.25	.63	.55	100 lbs. seed at \$4.00 cwt.	4.00	5.18	
Irrigate 1x	.10	.23		4 ac-in. @ 2.40/ac-ft	.80	1.03	
Insurance (on grain)					.35	.35	
Land Planing (1x charged against grain crop because of 2x every other year basis)	.30	.75	.71	50¢/ac. rental	.50	1.96	
TOTAL CULTURAL COSTS	1.50	\$3.74	\$4.17		\$14.65	\$22.56	
Harvest Costs							
Combine	.40	1.00	2.00	(Roadside Delivery)		\$3.00	
TOTAL HARVEST COSTS		\$1.00	\$2.00			\$3.00	
Cash Overhead							
Misc., office, etc.						\$1.28	
Taxes & Insurance						\$10.92	
TOTAL CASH OVERHEAD						\$12.20	
TOTAL CASH COSTS						\$37.76	
Management 5% of 4,000 lbs. @ \$2.00 cwt.						\$4.00	
Annual Cost							
<u>INVESTMENT</u>	<u>Per Acre</u>	<u>Depreciation</u>		<u>Interest</u>			
Land	\$500.00			\$30.00			
Irrigation System	150.00		\$ 7.50	4.50			
Equip. & Building	102.00		7.38	3.14			
Total	\$752.00		\$14.88	\$37.64		\$52.52	
TOTAL COST PER ACRE						\$94.28	
Cost per cwt. @ 4,000 cwt. yield						\$ 2.36	

Sample Costs Per Cwt. at Varying Yields

Yield - lbs/acre	3,000	3,500	4,000	4,500	5,000	5,500
Cash & Management Cost/cwt.	\$1.36	\$1.18	\$1.05	\$.94	\$.86	\$.79
Investment Cost/cwt.	1.75	1.50	1.31	1.17	1.05	.96
Total Cost/cwt.	\$3.11	\$2.68	\$2.36	\$2.11	\$1.91	\$1.75

BASIS OF IRRIGATED BARLEY OR WHEAT COST STUDY

1. The cost study is based on a 640 acre field crop operation with 150 acres or irrigated barley or wheat. Other crops grown on the ranch may include one or more of the following crops: seed crops, grain sorghum, alfalfa hay, sugar beets, etc. Much of the equipment listed will be used on the entire acreage sometime during the year. Irrigation is based on an underground concrete pipe system complete with well, pump motor, etc.
2. In allocating the equipment cost per acre in the equipment list the following calculations were made: (a) "Original cost" of equipment is the estimated new cost. Except where otherwise designated, the equipment listed is based on the new cost. (b) "Original cost per acre" is the new or used cost divided by the number of acres the equipment will be used on. (c) "Depreciation" is based on the "per acre cost" divided by the expected life of the equipment. (d) "Interest on investment is figured on one half of the new cost per acre multiplied by 6%. Land is not considered a depreciable item and interest on it is figured at 6% of the full value.
3. Miscellaneous expenses have been found to be about 5% of the total cultural and harvest costs. They include such costs as preparing roadways, general weed control, office, bookkeeping, interest on operating money (for 6 months or less), etc.
4. Labor costs are based on a \$2.50 hourly rate for skilled labor and \$2.25 hourly rate for unskilled (irrigator). Included are cash wages, compensation insurance, Social Security and other benefits that the employer must pay.
5. Equipment operating costs are listed under fuel and repair. Included is the cost of fuel, maintenance, replacement parts, tires, etc. Tractor charges per hour are: 60 HP crawler diesel, \$2.35; 50 HP wheel diesel, \$1.40. (Horsepower is based on 75% of maximum).
6. Management (what the grower's decision making is worth) is figured at 5% of the market value of the crop.
7. Some growers may base their decisions as to which crops to grow by comparing cultural and harvest costs for specific crops with estimated gross income from the crops. This cost study should assist in this aspect of decision making as well as relate investment and other fixed costs which are basically fixed regardless of the crop to be grown. While a grower could not justify the investment indicated in this study for growing only irrigated barley or wheat, 5,000 lbs. or more per acre of irrigated grain may be an attractive rotation crop when considering the overall operation and cropping pattern of the ranch and cultural and harvest costs compared to gross income.
8. There is a column provided entitled "Your Cost Per Acre" which growers can use to insert their individual costs. Growers are encouraged to use this column which in turn should assist them with budget questions as well as evaluate their cost-income relationship with irrigated barley or wheat.
9. "Sample Costs Per Cwt. at Varying Yields," the table at the bottom of the study, shows how good to excellent yields reduce cost of production.
10. Six Glenn County irrigated grain growers furnished the basic information for this study. Appreciation is expressed to these growers.

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