

# DRYLAND

# GRAIN

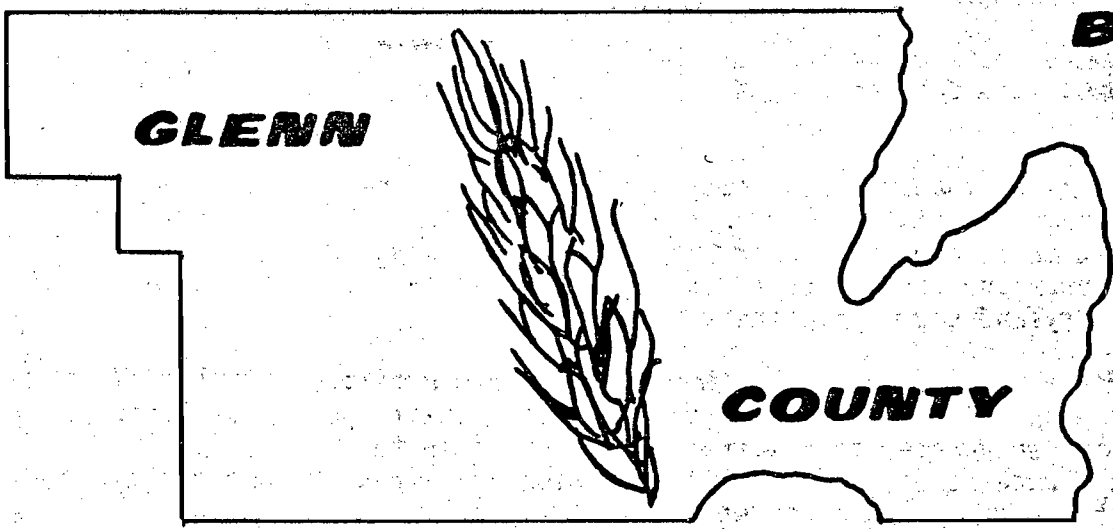
# PRODUCTION

# COSTS

**TENANT**

**LANDOWNER**

**BASIS**



Robert L. Sailsbery  
Farm Advisor

Lynn Horel  
Staff Research Associate

University of California  
Cooperative Extension Service  
Glenn County

## BASIS OF DRYLAND GRAIN COST STUDY

1. The cost study is based on a 1,000 acre dryland grain operation (barley, wheat, or both) where the grower is renting the land and planting 1,000 acres each year. Normally the land planted will be on a 2 to 5 year frequency. A grower may be summer fallowing a comparable acreage. This study does not attempt to reflect a grain-sheep operation. The production costs of wheat and barley are somewhat similar. This cost study should serve to represent a basic input regardless of whether wheat or barley are being grown. This cost study is figured on a tenant-landowner basis with the landowner receiving 33 1/3% of the gross income from the grain and the tenant paying all production costs.
2. Miscellaneous expenses have been found to be about 8% of the total cultural and harvest costs. They include such costs as use of pickup truck, office, etc.
3. Labor costs are based on a \$5.75 hourly rate. Included are cash wages, compensation insurance, Social Security, Unemployment Insurance, and other benefits that the employer might pay.
4. Management (what the grower's decision making is worth) is figured at 5% of the market value of the crop. This is an arbitrary number not based on experimental evidence.
5. These sample costs to produce dryland grain may not represent the cost of any one individual grower, however, should serve as a basic guideline for dryland wheat or barley production.
6. Many growers will most likely consider pre-harvest and harvest cash costs in making decisions regarding planting dryland grain. Since there must be a somewhat uniform basis for machinery, machinery inventory costs are usually based on new costs and may not reflect individual dryland grower machinery costs.
7. On the first page of the study 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.
8. Appreciation is expressed to two Glenn County growers assisting with the development of this cost study.



CASH FLOW & INVESTMENT SUMMARY FOR WHEAT

BUDGET RECORD NUMBER 154

COST OF PRODUCTION FOR DRYLAND GRAIN  
 GLENN COUNTY 1981 BY R. SAILSBERY, FARM ADVISOR L. HOREL, SRA  
 TENANT - LANDOWNER BASIS WITH RENT AT 33.3% OF GROSS INCOME

MONTHLY SUMMARY OF RECEIPTS AND EXPENSES

CATEGORY	UNIT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
TOTAL RECEIPTS	\$/AC	0.00	0.00	0.00	0.00	0.00	32.50	65.00	32.50	0.00	0.00	0.00	0.00	130.00
OPERATING EXPENSES														
WHEAT, SEED	\$/AC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.63	5.63	0.00	11.25
BROAD LEAF HERB	\$/AC	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00
CUSTOM AIR HERB	\$/AC	0.00	3.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.75
BANKOUT	\$/AC	0.00	0.00	0.00	0.00	0.00	0.75	1.50	0.75	0.00	0.00	0.00	0.00	3.00
MACHINE LABOR COST	\$/AC	0.06	1.01	1.01	1.31	0.10	0.96	1.83	0.96	1.96	6.20	4.58	0.06	20.05
INTEREST ON OPER. CAP.	\$/AC	0.01	0.61	0.16	0.15	0.01	0.07	0.06	0.00	0.77	2.16	1.58	0.01	5.59
TRACTOR COST	\$/AC	0.00	1.70	0.77	1.02	0.03	0.03	0.03	0.03	2.79	4.11	2.80	0.00	13.33
EQUIPMENT COST	\$/AC	0.06	1.21	1.21	1.34	0.06	1.28	2.50	1.28	1.72	4.18	3.50	0.06	18.42
BLDG OPER. COST	\$/AC	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.07
TOTAL EXPENSES	\$/AC	0.14	10.29	3.16	3.63	0.21	3.10	5.93	3.04	7.25	22.28	18.09	0.14	77.46

MONTHLY IRRIGATION AND LABOR REQUIREMENTS

MACHINE LABOR	HR/AC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
		0.01	0.18	0.18	0.23	0.02	0.17	0.32	0.17	0.34	1.08	0.80	0.01	3.49

MACHINERY FIXED AND VARIABLE COSTS PER ACRE

MACHINE	CODE	SIZE	PURCHASE PRICE	YEARS OWNED	ANN HOURS USED	FIXED COST PER ACRE			VARIABLE COST PER ACRE				HRS PER ACRE	
						DEPR.	INTER.	TAX \$/INS	TOTAL	FUEL	LUBE	REPAIRS		TOTAL
CRAWLER 90HP	10	90.0	20000.	15.	900.	1.88	2.72	0.79	5.40	5.52	0.83	1.81	8.16	1.378
CRAWLER 125HP	11	125.0	105000.	17.	900.	2.54	3.92	1.16	7.62	2.03	0.30	2.85	5.18	0.444
TRUCK-2T, USED	13	2.0	9000.	4.	1400.	0.45	0.25	0.06	0.77	3.33	0.50	0.73	4.57	0.444
PICKUP 1/2 T	14	90.0	8000.	3.	1350.	0.13	0.06	0.01	0.20	0.52	0.08	0.12	0.72	0.109
COMBINE 16' USED	26	16.0	40000.	10.	90.	17.55	17.45	4.99	39.99	1.95	0.29	2.64	4.88	0.499
DISC 3-OFFSET	62	18.0	12500.	14.	180.	0.77	0.87	0.27	1.91	0.00	0.03	1.25	1.28	0.174
DISC 4-OFFSET	63	18.0	12500.	14.	180.	0.77	0.87	0.27	1.91	0.00	0.03	1.25	1.28	0.174
DISC 2-STUBBLE	66	12.0	15000.	9.	280.	0.62	0.54	0.16	1.32	0.00	0.02	1.13	1.15	0.130
DISC 1-STUBBLE	67	12.0	15000.	9.	280.	0.62	0.54	0.16	1.32	0.00	0.02	1.13	1.15	0.130
SPIKE HARR.&CART	74	40.0	7000.	15.	140.	0.30	0.35	0.11	0.77	0.00	0.01	0.37	0.38	0.099
HDTY SPRINGTOOTH	79	30.0	4500.	15.	100.	0.36	0.42	0.13	0.92	0.00	0.01	0.29	0.30	0.133
GRAIN AUGER, 6"	105	6.0	2000.	15.	100.	0.64	0.75	0.24	1.63	0.00	0.02	0.93	0.95	0.529
BULK SEEDER	107	14.0	5000.	15.	90.	0.77	0.91	0.29	1.97	0.00	0.02	0.97	0.99	0.230
1AFL CARRIER	150	5.0	4200.	15.	200.	0.05	0.06	0.02	0.13	0.00	0.00	0.02	0.02	0.041
FARM SHOP	2		6600.	30.		0.20	0.47	0.07	0.74	0.07		0.00	0.07	
TOOLS-SHOP EQUIP	4		1650.	15.		0.08	0.14	0.02	0.23	0.00		0.00	0.00	
MACHINERY & EQUIPMENT INVESTMENT & COSTS PER ACRE			268.			27.72	30.35	8.76	66.82	13.42	2.15	15.49	31.06	

TOTAL INVESTMENT 267950.

BASED ON 1000 ACRES OF WHEAT, BARLEY OR BOTH  
 DOES NOT ATTEMPT TO REFLECT GRAIN - SHEEP OPERATION  
 YIELD OF 20 CWT PER ACRE  
 DATE PRINTED: 03/07/81

UPDATED 03/07/81

FUEL USE SUMMARY FOR BUDGET RECORD NUMBER 154  
 COST OF PRODUCTION FOR DRYLAND GRAIN  
 GLENN COUNTY 1981 BY R. SAILSBERY, FARM ADVISOR L. HOREL, SRA  
 TENANT - LANDOWNER BASIS WITH RENT AT 33.3% OF GROSS INCOME

FUEL USED IN GALLONS PER HOUR

CRAWLER 90HP	3.640
CRAWLER 125HP	4.760
TRUCK-2T, USED	6.250
PICKUP 1/2 T	4.000
COMBINE 16' USED	4.070

FUEL ALLOCATED TO OPERATIONS IN GALLONS PER ACRE COVERED

MACHINE	GALLONS	POWER UNIT
TRUCK-2T, USED	0.139	
PICKUP 1/2 T	0.073	
COMBINE 16' USED	2.033	
DISC 2-STUBBLE	1.364	CRAWLER 125HP
DISC 1-STUBBLE	1.043	CRAWLER 90HP
DISC 4-OFFSET	0.695	CRAWLER 90HP
DISC 3-OFFSET	0.909	CRAWLER 125HP
SPIKE HARR.&CART	0.398	CRAWLER 90HP
HDTY SPRINGTOOTH	0.531	CRAWLER 90HP
BULK SEEDER	0.922	CRAWLER 90HP
SPIKE HARR.&CART	0.520	CRAWLER 125HP
INPL CARRIER	0.163	CRAWLER 90HP
GRAIN AUGER, 6"	2.118	CRAWLER 90HP

FUEL ALLOCATED TO OPERATIONS FOR THE BUDGET UNIT

	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL	FUEL TYPE
DISC 2-STUBBLE	0.000	0.682	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.682	DIESEL
DISC 1-STUBBLE	0.000	0.000	0.521	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.521	DIESEL
DISC 4-OFFSET	0.000	0.000	0.000	0.695	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.695	DIESEL
DISC 3-OFFSET	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.909	0.000	0.000	0.000	0.909	DIESEL
SPIKE HARR.&CART	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.398	0.398	0.000	0.000	0.796	DIESEL
HDTY SPRINGTOOTH	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.531	0.000	0.000	0.531	DIESEL
BULK SEEDER	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.461	0.461	0.000	0.922	DIESEL
SPIKE HARR.&CART	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.260	0.260	0.000	0.520	DIESEL
INPL CARRIER	0.000	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.000	0.000	0.000	0.000	0.163	DIESEL
GRAIN AUGER, 6"	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.059	1.059	0.000	2.118	DIESEL
COMBINE 16' USED	0.000	0.000	0.000	0.000	0.000	0.508	1.016	0.508	0.000	0.000	0.000	0.000	2.033	DIESEL
PICKUP 1/2 T	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.436	GAS
TRUCK-2T, USED	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.389	1.389	0.000	2.778	GAS
TOTALS	0.036	0.741	0.581	0.755	0.060	0.568	1.076	0.568	1.343	4.134	3.205	0.036	13.104	

GALLONS FUEL BY TYPE  
 3.21 GAS  
 0.00 LP  
 9.89 DIESEL  
 0.00 N. GAS  
 0.00 KWHR

FUEL TYPES  
 1=GAS  
 2=L.P.  
 3=DIESEL  
 4=N. GAS  
 5=ELEC.

BASED ON 1000 ACRES OF WHEAT, BARLEY OR BOTH  
 DOES NOT ATTEMPT TO REFLECT GRAIN - SHEEP OPERATION  
 YIELD OF 20 CWT PER ACRE  
 DATE PRINTED: 03/07/81

UPDATED 03/07/81

MACHINERY OPERATIONS SUMMARY BUDGET RECORD NUMBER 154  
 COST OF PRODUCTION FOR DRYLAND GRAIN  
 GLENN COUNTY 1981 BY R. SAILSBERY, FARM ADVISOR L. HOREL, SRA  
 TENANT - LANDOWNER BASIS WITH RENT AT 33.3% OF GROSS INCOME

OPERATION	ITEM NO.	DATE	TIMES OVER	LABOR HOURS	MACHINE HOURS	FUEL, OIL, LUB., REP. PER ACRE	FIXED COSTS PER ACRE
DISC 3-OFFSET	11, 62	SEPT	1.00	0.210	0.174	3.51	5.19
SPIKE HARR.&CART	10, 74	SEPT	1.00	0.120	0.099	0.95	1.14
PICKUP 1/2 T	14	SEPT	0.50	0.011	0.009	0.06	0.02
SPIKE HARR.&CART	10, 74	OCT	1.00	0.120	0.099	0.95	1.14
NOTY SPRINGTOOTH	10, 79	OCT	1.00	0.160	0.133	1.05	1.42
BULK SEEDER	10, 107	OCT	0.50	0.139	0.115	1.15	1.42
SPIKE HARR.&CART	11, 74	OCT	0.50	0.060	0.050	0.83	1.32
GRAIN AUGER, 6"	10, 105	OCT	0.50	0.320	0.264	1.98	1.81
PICKUP 1/2 T	14	OCT	0.50	0.011	0.009	0.06	0.02
TRUCK-2T, USED	13	OCT	10.00	0.267	0.222	2.28	0.39
BULK SEEDER	10, 107	NOV	0.50	0.139	0.115	1.15	1.42
SPIKE HARR.&CART	11, 74	NOV	0.50	0.060	0.050	0.83	1.32
GRAIN AUGER, 6"	10, 105	NOV	0.50	0.320	0.264	1.98	1.81
PICKUP 1/2 T	14	NOV	0.50	0.011	0.009	0.06	0.02
TRUCK-2T, USED	13	NOV	10.00	0.267	0.222	2.28	0.39
PICKUP 1/2 T	14	DEC	0.50	0.011	0.009	0.06	0.02
PICKUP 1/2 T	14	JAN	0.50	0.011	0.009	0.06	0.02
DISC 2-STUBBLE	11, 66	FEB	0.50	0.158	0.130	2.82	3.78
IMPL CARRIER	10, 150	FEB	0.14	0.007	0.006	0.04	0.04
PICKUP 1/2 T	14	FEB	0.50	0.011	0.009	0.06	0.02
DISC 1-STUBBLE	10, 67	MAR	0.50	0.158	0.130	1.89	1.81
IMPL CARRIER	10, 150	MAR	0.14	0.007	0.006	0.04	0.04
PICKUP 1/2 T	14	MAR	0.50	0.011	0.009	0.06	0.02
DISC 4-OFFSET	10, 63	APR	1.00	0.210	0.174	2.26	2.56
IMPL CARRIER	10, 150	APR	0.14	0.007	0.006	0.04	0.04
PICKUP 1/2 T	14	APR	0.50	0.011	0.009	0.06	0.02
IMPL CARRIER	10, 150	MAY	0.14	0.007	0.006	0.04	0.04
PICKUP 1/2 T	14	MAY	0.50	0.011	0.009	0.06	0.02
IMPL CARRIER	10, 150	JUNE	0.14	0.007	0.006	0.04	0.04
COMBINE 16' USED	26	JUNE	0.25	0.150	0.125	1.22	10.00
PICKUP 1/2 T	14	JUNE	0.50	0.011	0.009	0.06	0.02
IMPL CARRIER	10, 150	JULY	0.14	0.007	0.006	0.04	0.04
COMBINE 16' USED	26	JULY	0.50	0.300	0.250	2.44	19.99
PICKUP 1/2 T	14	JULY	0.50	0.011	0.009	0.06	0.02
IMPL CARRIER	10, 150	AUG	0.14	0.007	0.006	0.04	0.04
COMBINE 16' USED	26	AUG	0.25	0.150	0.125	1.22	10.00
PICKUP 1/2 T	14	AUG	0.50	0.011	0.009	0.06	0.02

TOTALS 3.488 2.891 31.75 67.38

BASED ON 1000 ACRES OF WHEAT, BARLEY OR BOTH  
 DOES NOT ATTEMPT TO REFLECT GRAIN - SHEEP OPERATION  
 YIELD OF 20 CWT PER ACRE  
 DATE PRINTED: 03/07/81

UPDATED 03/07/81

RANGING ANALYSIS FOR BUDGET RECORD NUMBER 154  
 COST OF PRODUCTION FOR DRYLAND GRAIN  
 GLENN COUNTY 1981 BY R. SAILSBERY, FARM ADVISOR L. HOREL, SRA  
 TENANT - LANDOWNER BASIS WITH RENT AT 33.3% OF GROSS INCOME

INCOME ABOVE VARIABLE COSTS  
 WHEN THE PRICE OF WHEAT  
 AND THE QUANTITY OF WHEAT

QUANTITY OF WHEAT	PRICE OF WHEAT				
	5.90	6.20	6.50	6.80	7.10
16.00	16.94	21.74	26.54	31.34	36.14
18.00	28.74	34.14	39.54	44.94	50.34
20.00	40.54	46.54	52.54	58.54	64.54
22.00	52.34	58.94	65.54	72.14	78.74
24.00	64.14	71.34	78.54	85.74	92.94

INCOME ABOVE ALL CASH COSTS  
 WHEN THE PRICE OF WHEAT  
 AND THE QUANTITY OF WHEAT

QUANTITY OF WHEAT	PRICE OF WHEAT				
	5.90	6.20	6.50	6.80	7.10
16.00	-48.16	-43.36	-38.56	-33.76	-28.96
18.00	-36.36	-30.96	-25.56	-20.16	-14.76
20.00	-24.56	-18.56	-12.56	-6.56	-0.56
22.00	-12.76	-6.16	0.44	7.04	13.64
24.00	-0.96	6.24	13.44	20.64	27.84

INCOME ABOVE ALL COSTS  
 WHEN THE PRICE OF WHEAT  
 AND THE QUANTITY OF WHEAT

QUANTITY OF WHEAT	PRICE OF WHEAT				
	5.90	6.20	6.50	6.80	7.10
16.00	-107.53	-102.73	-97.93	-93.13	-88.33
18.00	-95.73	-90.33	-84.93	-79.53	-74.13
20.00	-83.93	-77.93	-71.93	-65.93	-59.93
22.00	-72.13	-65.53	-58.93	-52.33	-45.73
24.00	-60.33	-53.13	-45.93	-38.73	-31.53

BASED ON 1000 ACRES OF WHEAT, BARLEY OR BOTH  
 DOES NOT ATTEMPT TO REFLECT GRAIN - SHEEP OPERATION  
 YIELD OF 20 CWT PER ACRE  
 DATE PRINTED: 03/07/81

UPDATED 03/07/81

STORED DATA PAGE (NO CALCULATIONS) FOR WHEAT

BUDGET RECORD NUMBER 154

COST OF PRODUCTION FOR DRYLAND GRAIN
GLENN COUNTY 1981 BY R. SAILSBERY, FARM ADVISOR L. HOREL, SRA
TENANT - LANDOWNER BASIS WITH RENT AT 33.3% OF GROSS INCOME

COSTS AND RETURNS WILL BE DIVIDED BY 20.0 CWT. TO OBTAIN PER CWT. COSTS

Table with columns: LINE, PRODUCTION, 1-12 (MONTHS), PRICE, SHARE, UNIT, ITER, TYPE, XXXX. Includes rows for WHEAT and OPERATING INPUTS like WHEAT SEED, BROAD LEAF HERB, etc.

Table with columns: MACHINERY REQUIREMENTS, IMPLEMENTS = TIMES OVER, TRUCKS = # MILES/ACRE, TRACTORS = HRS/ACRE, M CREW LABOR, POWER UNIT, MACH CODE, TYPE, HARV CODE. Lists various agricultural equipment like DISC, SPIKE HARR, etc.

Table with columns: EQUIPMENT REQUIREMENTS, NUMBER UNITS, PROPORT OF COST, XXX EQUIP CODE, TYPE, XXXX. Lists FARM SHOP, TOOLS-SHOP EQUIP, etc.

BASED ON 1000 ACRES OF WHEAT, BARLEY OR BOTH DOES NOT ATTEMPT TO REFLECT GRAIN - SHEEP OPERATION YIELD OF 20 CWT PER ACRE
UPDATED 03/07/81
MACHINERY COMPLEMENT 3
EQUIPMENT COMPLEMENT 1

Table with columns: LINE CHANGE, GENERAL NAME CHANGE, MACHNRY NAME CHANGE. Lists changes for BANKOUT, CRAWLER 90HP, SPIKE HARR, etc.

Table with columns: RM CL, VALUE, RM CL, VALUE, RM CL, VALUE, RM CL, VALUE, RM CL, VALUE, RM CL, VALUE. Lists numerical values for MACH COMP CHGS and EDDAT COMP CHGS.