

1979

EC79-872 Estimated Crop and Livestock Production Costs

Larry L. Bitney

Lynn H. Lutgen

Leslie F. Sheffield

Robert E.J. Retzlaff

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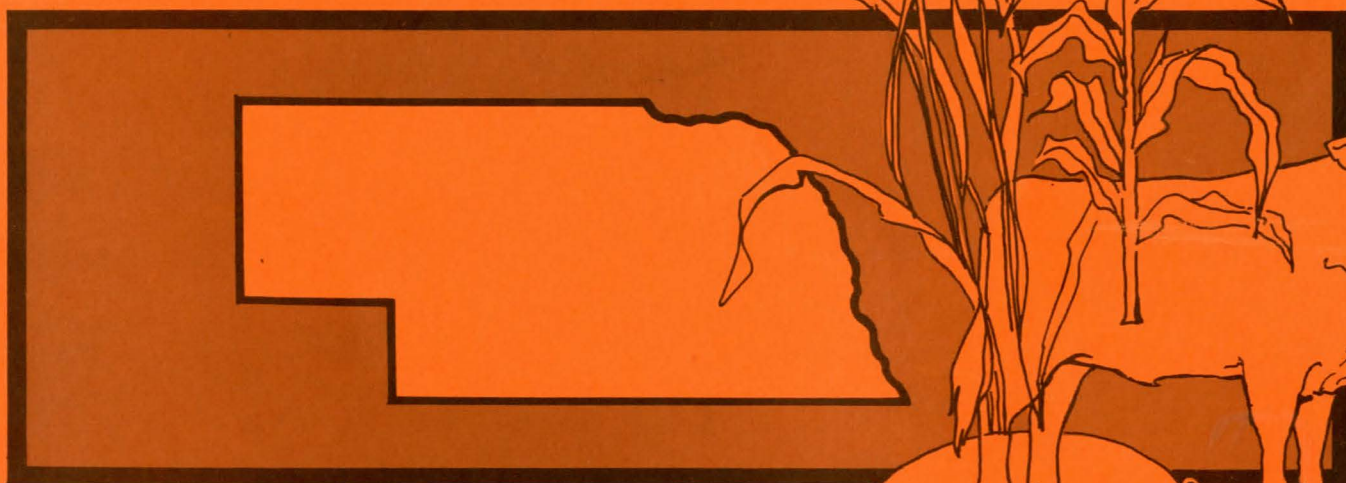
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EC 79-872

ESTIMATED CROP AND LIVESTOCK PRODUCTION COSTS

NEBRASKA



1980

By

University of Nebraska - Lincoln
Agricultural Economics Extension Staff

Larry L. Bitney
Lynn H. Lutgen
Leslie F. Sheffield
Robert E. J. Retzlaff, Dist. I
Robert E. Perry, Dist. II
Paul E. Miller, Dist. IV
Douglas D. Duey, Dist. V



EXTENSION WORK IN "AGRICULTURE, HOME ECONOMICS AND SUBJECTS RELATING THERETO,"
THE COOPERATIVE EXTENSION SERVICE, INSTITUTE OF AGRICULTURE AND NATURAL RESOURCES,
UNIVERSITY OF NEBRASKA-LINCOLN, COOPERATING WITH THE COUNTIES AND THE U.S. DEPARTMENT OF AGRICULTURE
LEO E. LUCAS, DIRECTOR

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Estimated Crop and Livestock Production Costs Nebraska -- 1980

Edited by Larry L. Bitney, Extension Economist

Introduction

The crop and livestock budgets in this publication are intended for use by farmers, lenders, and farm advisors in formulating and evaluating production and financial plans for 1980. These budgets were prepared in the fall of 1979, using estimates of input costs which are most likely to occur in 1980. Due to many uncertainties, especially relating to energy costs, the actual costs which will be incurred by producers in 1980 may differ from these estimates. For this reason, the budgets are presented in a detailed format so that the user may adjust the cost of individual items for general price changes or to reflect price variations between locations. The prices of selected input items used in preparing these budgets are presented on page iv.

The 1980 crop budgets reflect the most dramatic year-to-year increase in production costs since we began publishing this series in 1975. For example, corn production costs are projected to be 15-20% higher in 1980 than they were in 1979. This is about equal to the total increase realized over the previous four year period (1975-79). Simple averages of total corn production costs shown in this publication are \$2.66/bu. for irrigated corn and \$2.63/bu. for non-irrigated corn.

Production costs and cash flows realized by individual producers may vary considerably from those shown in this publication. A highly leveraged producer who has recently purchased his land will likely have cash flow requirements greater than the costs shown here. An established producer in a favorable equity position will likely have cash flow requirements less than the costs shown here. There are a host of other factors which also cause farm-to-farm variation in production costs such as weather, soil type, varieties of seed, amount of fertilizer, machinery use, and level of management. Farm record studies often show over 50% variation in production costs of a single commodity within a county.

Authors

The crop enterprise budgets were prepared for each area of the state by the District Extension Specialists (Farm Management) as follows: Panhandle--Robert E. J. Retzlaff, Panhandle Station; Southwest and North--Robert E. Perry, North Platte Station; Central--Paul E. Miller, South Central Station; and Northeast, East, and Southeast--Douglas D. Duey, Southeast Extension Headquarters. Irrigation investment and energy cost data were gathered by Leslie F. Sheffield, Extension Economist (Farm Management). Irrigation costs were calculated with the aid of the AGNET "Pump" computer program. Machinery cost data were assembled by Douglas Duey with the aid of the other District Specialists.

The livestock enterprise budgets were developed generally on a statewide basis as follows: Dairy--Douglas D. Duey with the aid of Don J. Kubik, District Extension Specialist (Dairy), Northeast Station; Sheep--Lynn H. Lutgen, Extension Economist (Marketing); Swine--Larry L. Bitney; Beef cows and other range-area beef enterprises--Robert E. Perry; and Beef feeding--Larry L. Bitney.

Budgeting Procedure -- Crops

The crop budgets in this publication were developed with the aid of a computerized crop budgeting program (CROPBUDGET), which is available on the agricultural computer network (AGNET). This program automates many of the tedious calculations which are required in preparing crop budgets.

A benchmark, or "typical", farm unit was selected for each area for which budgets were prepared. Each benchmark farm represents the farming or ranching operation of an "above average" operator in the area. The selection of a benchmark farm directly affects the production costs shown in the crop enterprise budgets. The relative level of management is reflected in the cultural practices employed, fertilization rates, and expected yields. The inventory of machinery, the size of each machine, and the amount each machine is used annually determine the fixed machinery cost per acre. Thus, the size of the farm, the cropping plan, and the machinery inventory are important determinants of crop production costs. A description of the benchmark farm and the machinery inventory precedes the crop budgets for each area in this publication.

Current prices for the machinery used on each benchmark farm were collected from selected dealers. Costing factors, based largely on information in the Ag. Engineer's Yearbook were applied to determine repair rates, annual fixed costs, and accomplishment rates. Fuel consumption factors were based on Nebraska tractor test data. The costing factors and fuel consumption rates are stored in the CROPBUDGET program.

Irrigation costs were calculated using current prices of irrigation equipment, engineering performance standards, and typical water application rates. A detailed description of the irrigation costs are presented in Appendix I in the back of this publication.

Tillage practices, plant population, yields, custom operations, and other practices which are typical in the area of the benchmark farm were selected, based on farm record data, workshops with growers, consultation with Extension specialists in other disciplines, and the judgment of the farm management specialist.

Yields shown in the budgets are estimates of those which an above average producer might average over several years, including years of low yields due to drouth, hail, insect damage, etc. Consequently, no allowance was made for the expense of crop insurance, or the income from crop insurance proceeds.

Labor requirements were calculated from machinery accomplishment rates, with an additional 20% added on for "non-field" time required for crop production, such as getting machinery ready, driving to and from fields, hauling fertilizer, buying seed, chemicals, and other supplies.

Interest on operating expenses was charged at 11% for the portion of the year that cash was tied up.

Estimated land values as of August, 1979, were used as a basis for the land charge. Since irrigation development costs are charged as part of the fixed machinery costs, the value shown for irrigated land reflects the price of non-irrigated land with irrigation potential. Taxes were estimated at 1% of land value. Interest was charged at 6% of land value.

Farm overhead expenses were estimated to be 5% of other cash expenses based on past studies of farm records. Overhead expenses include items which are normally not allocated to individual farm enterprises, yet which are necessary to keep an ongoing business running. These include pickup expense, farm share of car expense, farm publications, unallocated farm utilities, cost of attending farm meetings, income tax preparation expense, etc.

Management charges were estimated on a per unit of production basis. These approximate what a hired manager may receive, and what the farm operator should receive for his management efforts.

Overhead and management charges are included so that the total production cost will reflect a charge for all inputs used in the production process. For a farmer's "internal management" they need not be considered. Historically, farm production cost budgets have not typically included these two items. But, with the recent interest by non-farm individuals and groups in farm production costs, we feel that they should definitely be included in a figure which is called total cost.

A Note on Land Charges

If the crop budgets in this publication are used in evaluating the equity of crop-share leases using the returns-based on contributions approach, the land charge will need to be adjusted in most cases. The land charge, which is calculated as 7% of land value, may be overstated for leasing purposes. There are two components of current land values--annual earnings and appreciation or capital gains. The landlord's contribution to a crop-share leasing arrangement should be based on the portion of land value attributable to annual earnings only. This may be hard to determine, however. An alternative approach would be to use the current market value, but a lower interest rate, such as 4%, which is approximately the long term average return to investments in farm real estate. As noted earlier, the land charge on pump irrigated land is based on equivalent non-irrigated land with irrigation potential. The irrigation development cost is included in the fixed irrigation cost.

Budgeting Procedure -- Livestock

The cost data presented in the livestock budgets are based on reviews of farm record summaries, interaction with producers in workshops, consultation with producers, consultation with specialists in other disciplines, and on the specialists' judgment and experience.

Input costs were used which were expected to prevail for 1980. These costs, particularly feed and feeder livestock, change rapidly. To accommodate these fluctuating prices, these budgets are presented in enough detail so that the user may adjust individual cost items to fit his current situation. As in the case of the crop budgets, overhead and management charges are included so that the total production cost will reflect a charge for all inputs used in the production process.

Prices Used for 1980 Crop & Livestock Budgets
(Estimated in September, 1979)

<u>Fertilizer</u>	N-(Anhydrous Ammonia)	12¢/#	
	W-(Liquid or dry)	22¢/#	
	P ₂ O ₅	25¢/#	
	K ₂ O	12¢/#	
	18-46-0 starter	\$290/ton	
	10-34-0 liquid	230/ton	
	Zinc Sulphate	90¢/#	
	SulPhoMag	\$120/ton	
	Lime	\$4.25/ton (plus hauling)	
<u>Insecticides</u>	Corn Rootworm-planting time soil appl.	8.00/A*	
	Corn Borer-material only	6.40/A	
	Aerial Spray-Corn Borer	8.90/A	
	-Rootworm beetle	5.50/A	
	-Grasshoppers	5.50/A	
	-Alfalfa weevil	5.50/A	
	-Greenbug	5.50/A	
	-Spider mites	5.50/A	
	-Western bean cutworm & armyworm	7.00/A	
		<u>Brdcast</u>	<u>Band</u>
<u>Herbicides</u>	Corn & Sorghum pre-emergence	\$12.00/A	\$6.00/A*
	Soybean pre-emergence	15.00/A	7.50/A
	Aerial Spray 2.4-D-Corn or sorghum	4.00/A	
	-Pastures	6.00/A	
<u>Seed</u>	Corn-Single cross	\$55/80,000 kernel bag	
	-3-way cross	50/80,000 kernel bag	
	Sorghum	50/cwt	
	Alfalfa	2.25/#	
	Wheat	4.50/bu	
	Soybean	9.00/bu	
	Oats	2.00/bu	
	Dry Edible Bean-Pinto	\$38/cwt	
	-Northern	40/cwt	
<u>Energy</u>	Diesel Fuel	95¢/gal (without tax)	
	Propane	43¢/gal (without tax)	
	Gasoline	95¢/gal (without tax)	
	Natural Gas	1.80/1,000 cu ft	
	Electricity-farmstead	4¢/kwh	
	-irrigation	6.5¢/kwh	
<u>Interest on Operating Capital</u>		11%	
<u>Labor</u>	Machinery Operators	5.00/hr	
	Other Farm Labor	3.00/hr	
<u>Feed**</u>	Soybean Meal (44% bulk)	\$200/ton	
	Corn	2.50/bu	
	Grain Sorghum	2.25/bu	
	Oats	1.35/bu	
	Alfalfa Hay (baled)	\$50/ton	
	Prairie Hay (baled)	45/ton	
	Cane Hay	30/ton	
	Corn Silage	22/ton	

* 30 inch rows

**Expected prices to be paid by livestock producers during 1980.

DESCRIPTION OF THE DITCH IRRIGATED BENCHMARK FARM, NEBRASKA PANHANDLE

This farm is intended to be representative of farming units located in the North Platte Valley and irrigating with water from irrigation project ditches. The cropland acreage of the farm and the typical acreages of major crops are shown.

<u>"Typical" Farm Acreage</u>		<u>Machinery Inventory</u>	<u>List Price</u>
Acres of cropland	240	Tractor 110 hp	\$29,922
Acres of dry edible beans	60	Tractor 80 hp	27,153
Acres of sugar beets	60	Tandem disc 15'	5,892
Acres of corn	60	Spinner plow 4-16"	4,425
Acres of alfalfa	40	Sprayer 28'	859
		Roller pack 12'	3,450
		Float 14'	800
		Planter 6 row 22"	6,250
		Rotary hoe 6 row 22"	2,242
		Cultivator-ditcher 6 row 22"	2,200
		Bean cutter 4 row 22"	1,950
		Bean windrower 4 row 22"	2,350
		*Combine with pickup attachment & corn hd	44,303
		*Beet defoliator 6 row 22"	6,250
		*Beet puller with tank 3 row 22"	18,500
		*Forage harvester 3 row 30"	13,360
		3 Trucks with beet box & side hoist	
		(1 new,	18,600
		1 - 8 years old,	9,000
		1 - 12 years old)	3,500
		Pickup	7,300
		*Baler	5,442
		*14' self propelled swather with condit.	14,741

*These machines are used on some additional acres for custom work.

ESTIMATED 1980 COSTS PER ACRE, NEBRASKA PANHANDLE

SUGAR BEETS, DITCH IRRIGATED

CROPLAND ACRES	220.0	EXPECTED YIELD PER ACRE	20.0
ACRES THIS CROP	60.0	ANIMAL UNITS OF GRAZING	0.0

JOB	ACRES/ HOUR	PURCHASED		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
TANDEM DISC	7.47			1.85	3.41	5.26
ANHYDROUS APPLICATOR	6.36			1.29	1.06	2.35
(MACHINE RENTED, TRACTOR OWNED)						
NITROGEN (LBS. N)		100.00	12.00			12.00
RENT APPLICATOR		1.00	0.50			0.50
BROADCAST SPREADER	16.73			0.49	0.40	0.89
(MACHINE RENTED, TRACTOR OWNED)						
P205 PHOSPHORUS		100.00	25.00			25.00
RENT SPREADER		1.00	0.50			0.50
NEMATICIDE		13.00	67.60			67.60
APPLY NEMATICIDE		1.00	6.50			6.50
MOLDBOARD FLOW	2.29			5.14	6.11	11.26
ROLLER OR PACKER	6.18			1.34	2.54	3.87
ROLLER OR PACKER	6.18			1.34	2.54	3.87
PLANTER (FERT.,HERB.,ETC)	3.20			4.58	7.20	11.77
SEED		2.00	15.70			15.70
HERBICIDE		7.00	4.90			4.90
THIN LABOR		1.00	32.00			32.00
WEED LABOR 1ST		1.00	18.00			18.00
WEED LABOR 2ND		1.00	15.00			15.00
WEED LABOR 3RD		1.00	14.00			14.00
WATER TAX		1.00	12.50			12.50
ROW CROP CULTIVATOR *	3.27			2.42	3.04	5.46
ROW CROP CULTIVATOR *	4.00			2.05	2.59	4.64
ROW CROP CULTIVATOR *	4.00			2.05	2.59	4.64
TOPPER	3.32			5.09	10.89	15.98
HARVESTER	2.00			10.20	28.53	38.74
SPRAYER	(CUSTOM OP.)			0.0		0.0
POWDERY MILDEW		1.00	7.50			7.50
POWDERY MILDEW		1.00	7.50			7.50
IRRIGATION	0.25			0.75	1.65	2.40
TRUCK ALLOWANCE	0.92			17.13	57.67	74.80

*Or ditching operation

CASH COSTS

PURCHASED INPUTS	239.20
VARIABLE MACHINERY COSTS	55.71
INTEREST ON OPERATING EXPENSE	22.71
(TOT. VARIABLE COSTS X 11.0 % X 0.7 YRS.)	
TOTAL CASH COSTS	317.62

LABOR

DIRECT LABOR	48.69
(8.1 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	366.31

FIXED COSTS

FIXED MACHINERY COSTS	130.23
TAXES ON LAND (\$1800 VALUE/ACRE X 1%)	18.00
INTEREST ON LAND (\$1800 VALUE/ACRE X 6%)	108.00
TOTAL FIXED COSTS	256.23
TOTAL COST, EXCEPT OVERHEAD AND MGT.	622.54

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	15.88
MANAGEMENT CHARGE	40.00
(\$ 2.00 X ESTIMATED YIELD)	
TOTAL OVERHEAD AND MANAGEMENT	55.88
TOTAL COST PER ACRE	678.42
TOTAL COST PER UNIT OF PRODUCTION	33.92
(BASED ON ESTIMATED YIELD)	

ESTIMATED 1980 COSTS PER ACRE, NEBRASKA PANHANDLE

DRY EDIBLE BEANS, DITCH IRRIGATED

CROPLAND ACRES 220.0
ACRES THIS CROP 60.0

EXPECTED YIELD PER ACRE 20.0
ANIMAL UNITS OF GRAZING 0.0

JOB	ACRES/ HOUR	PURCHASED INPUTS		MACHINE COSTS	
		AMOUNT	VALUE	VARIABLE	FIXED TOTAL
TANDEM DISC	7.47			1.85	3.41 5.26
MOLDBOARD FLOW	2.29			5.14	6.11 11.26
ROLLER OR PACKER	6.18			1.34	2.54 3.87
SPRAYER	11.03			0.64	1.17 1.81
HERBICIDE BRDCST		3.50	8.75		8.75
ROLLER OR PACKER	6.18			1.07	2.73 3.79
PLANTER (FERT., HERB., ETC)	2.67			4.98	7.69 12.68
SEED		60.00	24.00		24.00
P205 PHOSPHORUS		40.00	10.00		10.00
NITROGEN (LBS. N)		10.00	2.20		2.20
INSECTICIDE BAND		9.00	6.75		6.75
HAND LABOR		1.00	7.50		7.50
WATER TAX		1.00	12.50		12.50
ROTARY HOE	9.27			0.84	2.52 3.36
ROW CROP CULTIVATOR*	3.27			2.42	3.04 5.46
ROW CROP CULTIVATOR*	3.50			2.28	2.88 5.16
ROW CROP CULTIVATOR*	4.27			1.95	2.47 4.42
BEANCUTTER	2.83			3.77	7.28 11.05
WINDROWER	2.83			4.07	8.12 12.19
COMBINE, PICKUP	4.45			3.59	10.15 13.75
IRRIGATION	0.25			0.75	1.65 2.40
TRUCK ALLOWANCE	7.50			1.50	3.68 5.18

*Or ditching operation

CASH COSTS

PURCHASED INPUTS	71.70
VARIABLE MACHINERY COSTS	36.20
INTEREST ON OPERATING EXPENSE	8.31
(TOT. VARIABLE COSTS X 11.0 % X 0.7 YRS.)	
TOTAL CASH COSTS	116.20

LABOR

DIRECT LABOR	44.15
(7.4 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	160.35

FIXED COSTS

FIXED MACHINERY COSTS	65.45
TAXES ON LAND (\$1800 VALUE/ACRE X 1%)	18.00
INTEREST ON LAND (\$1800 VALUE/ACRE X 6%)	108.00
TOTAL FIXED COSTS	191.45
TOTAL COST, EXCEPT OVERHEAD AND MGT.	351.80

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	5.81
MANAGEMENT CHARGE	25.00
(\$ 1.25 X ESTIMATED YIELD)	
TOTAL OVERHEAD AND MANAGEMENT	30.81
TOTAL COST PER ACRE	382.61
TOTAL COST PER UNIT OF PRODUCTION	19.13
(BASED ON ESTIMATED YIELD)	

ESTIMATED 1980 COSTS PER ACRE, NEBRASKA PANHANDLE

CORN FOR GRAIN, DITCH IRRIGATED

CROPLAND ACRES	220.0	EXPECTED YIELD PER ACRE	120.0
ACRES THIS CROP	60.0	ANIMAL UNITS OF GRAZING	2.0

JOB	ACRES/ HOUR	PURCHASED INPUTS		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
TANDEM DISC	7.93			1.79	3.35	5.14
ANHYDROUS APPLICATOR	6.36			1.29	1.06	2.35
(MACHINE RENTED, TRACTOR OWNED)						
NITROGEN (LBS. N)		160.00	19.20			19.20
BROADCAST SPREADER	15.27			0.43	0.52	0.95
(MACHINE RENTED, TRACTOR OWNED)						
PHOS (LBS. P205)		40.00	10.00			10.00
ZINC SULFATE LBS.		5.00	4.50			4.50
TANDEM DISC	7.93			1.79	3.35	5.14
MOLDBOARD FLOW	2.29			5.14	6.11	11.26
ROLLER OR PACKER	6.18			1.34	2.54	3.87
PLANTER (FERT., HERB., ETC)	4.73			3.92	6.40	10.31
SEED 28000 STAND		1.00	19.25			19.25
HERBICIDE BAND		1.00	6.00			6.00
INSECTICIDE		1.00	8.00			8.00
WATER TAX		1.00	12.50			12.50
ROTARY HOE	9.27			0.84	2.52	3.36
ROW CROP CULTIVATOR*	4.77			1.79	2.27	4.06
ROW CROP CULTIVATOR*	7.73			1.26	1.64	2.90
COMBINE, CORN HEAD	2.65			9.85	29.56	39.41
IRRIGATION	0.40			0.75	1.65	2.40
TRUCK ALLOWANCE	2.00			3.94	7.16	11.10

*Or ditching operation

CASH COSTS

PURCHASED INPUTS	79.45
VARIABLE MACHINERY COSTS	34.12
INTEREST ON OPERATING EXPENSE	8.74
(TOT. VARIABLE COSTS X 11.0 % X 0.7 YRS.)	
TOTAL CASH COSTS	122.31

LABOR

DIRECT LABOR	30.65
(5.1 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	152.96

FIXED COSTS

FIXED MACHINERY COSTS	68.14
TAXES ON LAND (\$1800 VALUE/ACRE X 1%)	18.00
INTEREST ON LAND (\$1800 VALUE/ACRE X 6%)	108.00
TOTAL FIXED COSTS	194.14
TOTAL COST, EXCEPT OVERHEAD AND MGT.	347.11

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	6.12
MANAGEMENT CHARGE (\$ 0.10 X ESTIMATED YIELD)	12.00
TOTAL OVERHEAD AND MANAGEMENT	18.12
TOTAL COST PER ACRE	365.22
TOTAL COST PER UNIT OF PRODUCTION (BASED ON ESTIMATED YIELD)	3.04

ESTIMATED 1980 COSTS PER ACRE, NEBRASKA PANHANDLE

CORN SILAGE, DITCH IRRIGATED

CROPLAND ACRES	220.0	EXPECTED YIELD PER ACRE	18.0
ACRES THIS CROP	60.0	ANIMAL UNITS OF GRAZING	0.0

JOB	ACRES/ HOUR	PURCHASED		MACHINE COSTS	
		AMOUNT	VALUE	VARIABLE	FIXED TOTAL
TANDEM DISC	7.93			1.79	3.35 5.14
ANHYDROUS APPLICATOR	6.36			1.29	1.06 2.35
(MACHINE RENTED, TRACTOR OWNED)					
NITROGEN (LBS. N)		200.00	24.00		24.00
BROADCAST SPREADER	15.27			0.43	0.52 0.95
(MACHINE RENTED, TRACTOR OWNED)					
PHOS (P205)		60.00	15.00		15.00
ZINC SULFATE LBS.		5.00	4.50		4.50
TANDEM DISC	7.93			1.79	3.35 5.14
MOLDBOARD FLOW	2.29			5.14	6.11 11.26
ROLLER OR PACKER	6.18			1.34	2.54 3.87
PLANTER (FERT., HERB., ETC)	4.73			3.92	6.40 10.31
SEED 28000 STAND		1.00	19.25		19.25
HERBICIDE BAND		1.00	6.00		6.00
INSECTICIDE		1.00	8.00		8.00
WATER TAX		1.00	12.50		12.50
ROTARY HOE	9.27			0.84	2.52 3.36
ROW CROP CULTIVATOR*	4.77			1.79	2.27 4.06
ROW CROP CULTIVATOR*	7.73			1.26	1.64 2.90
FORAGE CHOPPER	1.77			8.04	14.05 22.09
IRRIGATION	0.40			0.75	1.65 2.40
TRUCK AND PACK	0.50			8.81	12.60 21.41

*Or ditching operation

CASH COSTS

PURCHASED INPUTS	89.25
VARIABLE MACHINERY COSTS	37.17
INTEREST ON OPERATING EXPENSE	9.73
(TOT. VARIABLE COSTS X 11.0 % X 0.7 YRS.)	
TOTAL CASH COSTS	136.16

LABOR

DIRECT LABOR	40.78
(6.8 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	176.93

FIXED COSTS

FIXED MACHINERY COSTS	58.07
TAXES ON LAND (\$1800 VALUE/ACRE X 1%)	18.00
INTEREST ON LAND (\$1800 VALUE/ACRE X 6%)	108.00
TOTAL FIXED COSTS	184.07
TOTAL COST, EXCEPT OVERHEAD AND MGT.	361.00

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	6.81
MANAGEMENT CHARGE	10.80
(\$ 0.60 X ESTIMATED YIELD)	
TOTAL OVERHEAD AND MANAGEMENT	17.61
TOTAL COST PER ACRE	378.61
TOTAL COST PER UNIT OF PRODUCTION	21.03
(BASED ON ESTIMATED YIELD)	

ESTIMATED 1980 COSTS PER ACRE, NEBRASKA PANHANDLE

ESTABLISHMENT ALFALFA WITH OATS, DITCH IRRIGATED

CROPLAND ACRES	220.0	EXPECTED YIELD PER ACRE	3.5
ACRES THIS CROP	40.0	ANIMAL UNITS OF GRAZING	0.0

JOB	ACRES/ HOUR	PURCHASED		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
MOLDBOARD PLOW	2.29			5.14	6.11	11.26
BROADCAST SPREADER	16.73			0.39	0.47	0.86
(MACHINE RENTED, TRACTOR OWNED)						
PHOS (LBS. P205)		50.00	12.50			12.50
RENT SPREADER		1.00	0.50			0.50
ROLLER OR PACKER	6.18			1.34	2.54	3.87
ROLLER OR PACKER	6.18			1.34	2.54	3.87
GRAIN DRILL	4.65			1.40	1.70	3.11
(MACHINE RENTED, TRACTOR OWNED)						
ALFALFA SEED		10.00	25.00			25.00
OATS		0.50	1.00			1.00
RENT ON DRILL		1.00	3.00			3.00
SELF-PROPELLED WINDROWER	5.24			2.73	5.22	7.95
FORAGE CHOPPER	1.77			7.74	14.05	21.79
SELF-PROPELLED WINDROWER	6.79			2.44	5.05	7.49
BALER, REGULAR	6.36			2.05	4.47	6.52
TWINE		1.00	0.90			0.90
HAUL & STACK		1.00	6.35			6.35
WATER TAX		1.00	12.50			12.50
IRRIGATION	0.50			0.75	1.65	2.40
HAUL OAT HAYLAGE	1.00			3.72	5.27	8.99

CASH COSTS

PURCHASED INPUTS	61.75
VARIABLE MACHINERY COSTS	29.03
INTEREST ON OPERATING EXPENSE	6.99
(TOT. VARIABLE COSTS X 11.0 % X 0.7 YRS.)	
TOTAL CASH COSTS	97.77

LABOR

DIRECT LABOR	30.57
(5.1 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	128.34

FIXED COSTS

FIXED MACHINERY COSTS	49.07
TAXES ON LAND (\$1800 VALUE/ACRE X 1%)	18.00
INTEREST ON LAND (\$1800 VALUE/ACRE X 6%)	108.00
TOTAL FIXED COSTS	175.07
TOTAL COST, EXCEPT OVERHEAD AND MGT.	303.41

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	4.89
MANAGEMENT CHARGE (\$ 2.00 X ESTIMATED YIELD)	7.00
TOTAL OVERHEAD AND MANAGEMENT	11.89
TOTAL COST PER ACRE	315.30
TOTAL COST PER UNIT OF PRODUCTION (BASED ON ESTIMATED YIELD)	90.09

ESTIMATED 1980 COSTS PER ACRE, NEBRASKA PANHANDLE

ALFALFA HAY, DITCH IRRIGATED

CROPLAND ACRES	220.0	EXPECTED YIELD PER ACRE	5.5
ACRES THIS CROP	40.0	ANIMAL UNITS OF GRAZING	0.0

JOB	ACRES/ HOUR	PURCHASED INPUTS		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
BROADCAST SPREADER	14.64			0.45	0.54	0.99
(MACHINE RENTED, TRACTOR OWNED)						
PHOS (P205)		50.00	12.50			12.50
RENT SPREADER		1.00	0.50			0.50
SELF-PROPELLED WINDROWER	4.91			2.81	5.27	8.08
BALER, REGULAR	5.45			2.34	4.65	6.99
TWINE		1.00	2.32			2.32
HAUL AND STACK		1.00	15.00			15.00
SELF-PROPELLED WINDROWER	5.18			1.73	5.23	6.96
BALER, REGULAR	5.45			2.34	4.65	6.99
TWINE		1.00	1.63			1.63
HAUL AND STACK		1.00	10.50			10.50
SELF-PROPELLED WINDROWER	5.82			1.70	5.14	6.85
BALER, REGULAR	5.82			2.25	4.57	6.82
TWINE		1.00	1.40			1.40
HAUL AND STACK		1.00	9.00			9.00
WATER TAX		1.00	12.50			12.50
IRRIGATION	0.40			0.75	1.65	2.40
CASH COSTS						
PURCHASED INPUTS				65.35		
VARIABLE MACHINERY COSTS				14.37		
INTEREST ON OPERATING EXPENSE				6.14		
(TOT. VARIABLE COSTS X 11.0 % X 0.7 YRS.)						
TOTAL CASH COSTS						85.86
LABOR						
DIRECT LABOR				22.05		
(3.7 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))						
TOTAL CASH COSTS & LABOR						107.92
SHARE OF SEEDING COSTS				18.02		
FIXED COSTS						
FIXED MACHINERY COSTS				31.71		
TAXES ON LAND (\$1800 VALUE/ACRE X 1%)				18.00		
INTEREST ON LAND (\$1800 VALUE/ACRE X 6%)				108.00		
TOTAL FIXED COSTS						175.73
TOTAL COST, EXCEPT OVERHEAD AND MGT.						283.65
OVERHEAD AND MANAGEMENT						
OVERHEAD (TOTAL CASH COSTS X 5%)				4.29		
MANAGEMENT CHARGE (\$ 2.00 X ESTIMATED YIELD)				11.00		
TOTAL OVERHEAD AND MANAGEMENT						15.29
TOTAL COST PER ACRE						298.94
TOTAL COST PER UNIT OF PRODUCTION (BASED ON ESTIMATED YIELD)						54.35

DESCRIPTION OF THE PUMP IRRIGATED BENCHMARK FARM, NEBRASKA PANHANDLE

The enterprise budgets prepared for this farm assume center pivot irrigation. Some farms utilizing pump irrigation may use surface irrigation, however, Budgets for the irrigated crops only are presented on the following pages. Budgets for the dryland crops on this farm would be identical to those shown for the non-irrigated farm.

The machinery inventory includes equipment for dryland crops, and usage of tractors and other machinery on dryland crops was considered when calculating machinery costs.

Typical acreages for the farm and the major crops are shown below. Other crops, such as irrigated wheat, sunflowers, or potatoes may be substituted for the major crops on some farms.

<u>"Typical" Farm Acreage</u>		<u>Machinery Inventory</u>	<u>List Price</u>
Cropland		150 hp tractor	\$40,818
Dryland acres	250	100 hp tractor	29,922
Irrigated acres	390	75 hp tractor	27,153
		110 hp diesel combine 20' grain head,	
		pickup, and 6 row 30" corn head	69,230
Acres of fallow	125	Tandem disc 19'	7,612
Acres of dryland wheat	125	Moldboard plow 6-16"	3,986
Acres of sugar beets	130	Roller packer 16'	4,190
Acres of corn	130	Sprayer 28'	859
Acres of beans	130	Planter 6 row 30"	6,878
		Rotary hoe 6 row 30"	2,242
		Cultivator 6 row 30"	2,940
		Defoliator 6 row 30"	6,250
		Puller 3 row 30"	18,500
		2 Trucks with beet boxes--tag axles	
		or double axle	24,200
			16,200
		Drill 24'	11,400
		Rodweeder 30'	4,388
		Field cultivator 18.5'	2,250
		Bean cutter 6 row 30"	3,270
		Bean windrower 6 row 30"	4,900

ESTIMATED 1980 COSTS PER ACRE, NEBRASKA PANHANDLE

SUGAR BEETS, CENTER PIVOT IRRIGATED, ELECTRIC 38 PSI - 20"

CROPLAND ACRES	640.0	EXPECTED YIELD PER ACRE	18.0
ACRES THIS CROP	133.0	ANIMAL UNITS OF GRAZING	0.0

JOB	ACRES/ HOUR	PURCHASED		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
TANDEM DISC	10.77			1.54	2.83	4.36
ANHYDROUS APPLICATOR	12.73			0.80	0.72	1.52
(MACHINE RENTED, TRACTOR OWNED)						
NITROGEN (LBS N)		100.00	12.00			12.00
BROADCAST SPREADER	15.00			0.44	0.53	0.96
(MACHINE RENTED, TRACTOR OWNED)						
PHOS (LBS P205)		100.00	25.00			25.00
MOLDBOARD PLOW	4.33			2.86	3.18	6.04
ROLLER OR PACKER	8.24			1.24	1.98	3.22
ROLLER OR PACKER	8.24			1.24	1.98	3.22
PLANTER (FERT., HERB., ETC)	5.32			2.83	3.95	6.78
SEED		2.00	15.70			15.70
HERBICIDE BAND		7.00	4.90			4.90
THIN LABOR		1.00	32.00			32.00
WEED LABOR 1ST		1.00	18.00			18.00
WEED LABOR 2ND		1.00	15.00			15.00
WEED LABOR 3RD		1.00	12.00			12.00
ROW CROP CULTIVATOR	5.09			1.96	2.12	4.08
ROW CROP CULTIVATOR	6.14			1.68	1.85	3.53
TOPPER	7.27			3.53	7.67	11.21
HARVESTER	3.10			7.97	22.33	30.29
SPRAYER (CUSTOM OP.)						
POWDERY MILDEW		1.00	8.50	0.0		8.50
IRRIGATE 20 INCHES	0.0			45.42	45.96	91.38
TRUCK ALLOWANCE	0.75			13.64	35.66	49.30

CASH COSTS

PURCHASED INPUTS	143.10
VARIABLE MACHINERY COSTS	85.13
INTEREST ON OPERATING EXPENSE	17.57
(TOT. VARIABLE COSTS X 11.0 % X 0.7 YRS.)	
TOTAL CASH COSTS	245.81

LABOR

DIRECT LABOR	18.32
(3.1 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	264.12

FIXED COSTS

FIXED MACHINERY COSTS	130.76
TAXES ON LAND (\$ 600 VALUE/ACRE X 1%)	6.00
INTEREST ON LAND (\$ 600 VALUE/ACRE X 6%)	36.00
TOTAL FIXED COSTS	172.76
TOTAL COST, EXCEPT OVERHEAD AND MGT.	436.88

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	12.29
MANAGEMENT CHARGE	36.00
(\$ 2.00 X ESTIMATED YIELD)	
TOTAL OVERHEAD AND MANAGEMENT	48.29
TOTAL COST PER ACRE	485.17
TOTAL COST PER UNIT OF PRODUCTION	26.95
(BASED ON ESTIMATED YIELD)	

ESTIMATED 1980 COSTS PER ACRE, NEBRASKA PANHANDLE

DRY EDIBLE BEANS, CENTER PIVOT ELECTRIC 38 PSI - 10 "

CROPLAND ACRES	640.0	EXPECTED YIELD PER ACRE	20.0
ACRES THIS CROP	130.0	ANIMAL UNITS OF GRAZING	0.0

JOB	ACRES/ HOUR	PURCHASED		MACHINE COSTS	
		AMOUNT	VALUE	VARIABLE	FIXED TOTAL
TANDEM DISC	10.77			1.54	2.83 4.36
MOLDBOARD PLOW	4.33			2.86	3.18 6.04
ROLLER OR PACKER	8.24			1.24	1.98 3.22
SPRAYER	14.93			0.47	0.80 1.27
HERBICIDE BRDCST		3.50	8.75		8.75
ROLLER OR PACKER	8.24			1.24	1.98 3.22
PLANTER (FERT., HERB., ETC)	5.73			2.72	3.84 6.56
SEED		60.00	24.00		24.00
PHOS (P205 LBS)		45.00	11.25		11.25
NITROGEN (LBS)		10.00	2.50		2.50
HAND LABOR		1.00	6.50		6.50
ROTARY HOE	9.27			0.93	1.47 2.40
ROW CROP CULTIVATOR	5.09			1.96	2.12 4.08
ROW CROP CULTIVATOR	6.14			1.68	1.85 3.53
BEANCUTTER	7.73			1.98	4.50 6.47
WINDROWER	7.27			2.59	6.22 8.81
COMBINE, PICKUP	6.14			6.23	22.71 28.94
TANDEM DISC	10.77			1.54	2.83 4.36
IRRIGATE 10 INCHES	0.0			29.31	45.96 75.27
TRUCK ALLOWANCE	6.00			1.04	2.10 3.14

CASH COSTS

PURCHASED INPUTS	53.00
VARIABLE MACHINERY COSTS	57.32
INTEREST ON OPERATING EXPENSE	8.49
(TOT. VARIABLE COSTS X 11.0 % X 0.7 YRS.)	
TOTAL CASH COSTS	118.81

LABOR

DIRECT LABOR	11.79
(2.0 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	130.60

FIXED COSTS

FIXED MACHINERY COSTS	104.35
TAXES ON LAND (\$ 600 VALUE/ACRE X 1%)	6.00
INTEREST ON LAND (\$ 600 VALUE/ACRE X 6%)	36.00
TOTAL FIXED COSTS	146.35
TOTAL COST, EXCEPT OVERHEAD AND MGT.	276.95

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	5.94
MANAGEMENT CHARGE (\$ 1.25 X ESTIMATED YIELD)	25.00
TOTAL OVERHEAD AND MANAGEMENT	30.94
TOTAL COST PER ACRE	307.89
TOTAL COST PER UNIT OF PRODUCTION (BASED ON ESTIMATED YIELD)	15.39

ESTIMATED 1980 COSTS PER ACRE, NEBRASKA PANHANDLE

A-11

POTATOES, CENTER PIVOT IRRIGATED, ELECTRIC, 38 PSI - 18 "

CROPLAND ACRES	640.0	EXPECTED YIELD PER ACRE	300.0
ACRES THIS CROP	130.0	ANIMAL UNITS OF GRAZING	0.0

JOB	ACRES/ HOUR	PURCHASED INPUTS		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
TANDEM DISC	10.77			1.54	2.83	4.36
ANHYDROUS APPLICATOR	11.45			0.88	0.80	1.69
(MACHINE RENTED, TRACTOR OWNED)						
NITROGEN LBS N		150.00	18.00			18.00
BROADCAST SPREADER	13.64			0.60	0.60	1.21
(MACHINE RENTED, TRACTOR OWNED)						
PHOS (LBS P205)		135.00	33.75			33.75
MOLDBOARD PLOW	4.12			2.98	3.29	6.26
ROLLER OR PACKER	8.24			1.24	1.98	3.22
POTATO PLANTER	1.82			6.13	14.97	21.10
CERT. SEED		17.00	127.50			127.50
CUT AND TREAT		1.00	8.50			8.50
FLOAT	6.55			1.44	2.08	3.52
ROW CROP CULTIVATOR	6.14			1.68	1.85	3.53
SPRAYER	12.73			0.67	0.92	1.59
HERBICIDE		1.00	12.00			12.00
ROW CROP CULTIVATOR	6.14			1.68	1.85	3.53
WINDROWER	1.94			5.68	8.60	14.27
HARVESTER	1.70			9.02	18.00	27.03
CHISEL	6.18			2.71	3.14	5.85
SPRAYER	(CUSTOM OP.)			0.0		0.0
3X BLIGHT SPRAY		3.00	24.00			24.00
VINE KILLER		1.00	10.00			10.00
IRRIGATE 18 INCHES	0.0			42.20	45.96	88.16
TRUCK ALLOWANCE	0.40			20.19	15.17	35.36

CASH COSTS

PURCHASED INPUTS	233.75
VARIABLE MACHINERY COSTS	98.64
INTEREST ON OPERATING EXPENSE	25.59
(TOT. VARIABLE COSTS X 11.0 % X 0.7 YRS.)	
TOTAL CASH COSTS	357.99

LABOR

DIRECT LABOR	32.95
(5.5 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	390.94

FIXED COSTS

FIXED MACHINERY COSTS	122.04
TAXES ON LAND (\$ 600 VALUE/ACRE X 1%)	6.00
INTEREST ON LAND (\$ 600 VALUE/ACRE X 6%)	36.00
TOTAL FIXED COSTS	164.04
TOTAL COST, EXCEPT OVERHEAD AND MGT.	554.98

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	17.90
MANAGEMENT CHARGE (\$ 0.12 X ESTIMATED YIELD)	36.00
TOTAL OVERHEAD AND MANAGEMENT	53.90
TOTAL COST PER ACRE	608.88
TOTAL COST PER UNIT OF PRODUCTION (BASED ON ESTIMATED YIELD)	2.03

ESTIMATED 1980 COSTS PER ACRE, NEBRASKA PANHANDLE

CORN FOR GRAIN, CENTER PIVOT IRRIGATED ELECTRIC 38 PSI 18"

CROPLAND ACRES	640.0	EXPECTED YIELD PER ACRE	120.0
ACRES THIS CROP	130.0	ANIMAL UNITS OF GRAZING	2.0

JOB	ACRES/ HOUR	PURCHASED		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
TANDEM DISC	10.77			1.54	2.83	4.36
ANHYDROUS APPLICATOR	11.45			0.88	0.80	1.69
(MACHINE RENTED, TRACTOR OWNED)						
NITROGEN (LBS N)		150.00	18.00			18.00
BROADCAST SPREADER	12.73			0.65	0.65	1.29
(MACHINE RENTED, TRACTOR OWNED)						
PHOS (LBS P205)		60.00	15.00			15.00
MOLDBOARD PLOW	4.33			2.86	3.18	6.04
TANDEM DISC	10.77			1.54	2.83	4.36
ROLLER OR PACKER	8.24			1.24	1.98	3.22
PLANTER (FERT., HERB., ETC)	6.14			2.63	3.74	6.37
SEED 28000 STAND		1.00	19.25			19.25
INSECTICIDE		1.00	8.00			8.00
HERBICIDE (BAND)		1.00	6.00			6.00
ROTARY HOE	9.27			0.93	1.47	2.40
ROW CROP CULTIVATOR	6.14			1.68	1.85	3.53
ROW CROP CULTIVATOR	7.27			1.47	1.64	3.11
COMBINE, CORN HEAD	6.48			6.10	19.73	25.83
IRRIGATE 18 INCHES	0.0			42.80	45.96	88.76
TRUCK ALLOWANCE	3.00			5.49	4.20	9.69

CASH COSTS

PURCHASED INPUTS	66.25
VARIABLE MACHINERY COSTS	69.80
INTEREST ON OPERATING EXPENSE	10.48
(TOT. VARIABLE COSTS X 11.0 % X 0.7 YRS.)	
TOTAL CASH COSTS	146.53

LABOR

DIRECT LABOR	10.58
(1.8 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	157.11

FIXED COSTS

FIXED MACHINERY COSTS	90.85
TAXES ON LAND (\$ 600 VALUE/ACRE X 1%)	6.00
INTEREST ON LAND (\$ 600 VALUE/ACRE X 6%)	36.00
TOTAL FIXED COSTS	132.85
TOTAL COST, EXCEPT OVERHEAD AND MGT.	289.96

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	7.33
MANAGEMENT CHARGE (\$ 0.10 X ESTIMATED YIELD)	12.00
TOTAL OVERHEAD AND MANAGEMENT	19.33
TOTAL COST PER ACRE	309.28
TOTAL COST PER UNIT OF PRODUCTION (BASED ON ESTIMATED YIELD)	2.58

ESTIMATED 1980 COSTS PER ACRE, NEBRASKA PANHANDLE

WINTER WHEAT, CENTER PIVOT IRRIGATION, ELECTRIC 38 PSI - 10"

CROPLAND ACRES 640.0
ACRES THIS CROP 130.0EXPECTED YIELD PER ACRE 60.0
ANIMAL UNITS OF GRAZING 0.0

JOB	ACRES/ HOUR	PURCHASED			
		AMOUNT	INPUTS VALUE	MACHINE COSTS VARIABLE FIXED	TOTAL
MOLDBOARD PLOW	4.12			2.98 3.29	6.26
TANDEM DISC	10.77			1.54 2.83	4.36
ANHYDROUS APPLICATOR (MACHINE RENTED, TRACTOR OWNED)	11.45			0.88 0.80	1.69
NITROGEN (LBS N)		90.00	10.80		10.80
BROADCAST SPREADER (MACHINE RENTED, TRACTOR OWNED)	13.64			0.60 0.60	1.21
PHOS (LBS P205)		60.00	15.00		15.00
SPRING TOOTH HARROW	21.60			0.48 1.37	1.85
SPRING TOOTH HARROW	21.60			0.48 1.37	1.85
GRAIN DRILL	8.24			1.69 3.55	5.24
CERT SEED		2.00	9.00		9.00
COMBINE, GRAIN HEAD	10.30			3.84 14.21	18.05
IRRIGATE 10 INCHES	0.0			29.31 45.96	75.27
TRUCK ALLOWANCE	7.50			2.00 5.71	7.71

CASH COSTS

PURCHASED INPUTS	34.80
VARIABLE MACHINERY COSTS	43.81
INTEREST ON OPERATING EXPENSE (TOT. VARIABLE COSTS X 11.0 % X 0.7 YRS.)	6.05
TOTAL CASH COSTS	84.66

LABOR

DIRECT LABOR	5.64
(0.9 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	90.30

FIXED COSTS

FIXED MACHINERY COSTS	79.68
TAXES ON LAND (\$ 600 VALUE/ACRE X 1%)	6.00
INTEREST ON LAND (\$ 600 VALUE/ACRE X 6%)	36.00
TOTAL FIXED COSTS	121.68
TOTAL COST, EXCEPT OVERHEAD AND MGT.	211.98

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	4.23
MANAGEMENT CHARGE (\$ 0.15 X ESTIMATED YIELD)	9.00
TOTAL OVERHEAD AND MANAGEMENT	13.23
TOTAL COST PER ACRE	225.21
TOTAL COST PER UNIT OF PRODUCTION (BASED ON ESTIMATED YIELD)	3.75

ESTIMATED 1980 COSTS PER ACRE, NEBRASKA PANHANDLE

ALFALFA, CENTER PIVOT IRRIGATED ELECTRIC 38 PSI 25"

CROPLAND ACRES	640.0	EXPECTED YIELD PER ACRE	6.0
ACRES THIS CROP	130.0	ANIMAL UNITS OF GRAZING	0.0

JOB	ACRES/ HOUR	PURCHASED INPUTS		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
BROADCAST SPREADER	12.73			0.48	0.53	1.01
(MACHINE RENTED, TRACTOR OWNED)						
PHOS (LBS P205)		60.00	15.00			15.00
SELF-PROPELLED WINDROWER	5.09			2.90	5.67	8.58
BALER, REGULAR	5.09			1.89	2.88	4.76
WIRE		1.00	2.84			2.84
HAUL AND STACK		1.00	14.20			14.20
SELF-PROPELLED WINDROWER	6.11			2.68	5.53	8.21
BALER, REGULAR	6.11			1.64	2.65	4.29
WIRE		1.00	2.28			2.28
HAUL AND STACK		1.00	11.40			11.40
SELF-PROPELLED WINDROWER	7.21			2.52	5.41	7.93
BALER, REGULAR	6.85			1.50	2.54	4.04
WIRE		1.00	1.72			1.72
HAUL AND STACK		1.00	8.60			8.60
IRRIGATE 25 INCHES	0.0			53.48	45.96	99.44

CASH COSTS

PURCHASED INPUTS	56.04
VARIABLE MACHINERY COSTS	67.09
INTEREST ON OPERATING EXPENSE	9.48
(TOT. VARIABLE COSTS X 11.0 % X 0.7 YRS.)	
TOTAL CASH COSTS	132.61

LABOR

DIRECT LABOR	6.50
(1.1 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	139.11

SHARE OF SEEDING COSTS

10.60

FIXED COSTS

FIXED MACHINERY COSTS	71.17
TAXES ON LAND (\$ 600 VALUE/ACRE X 1%)	6.00
INTEREST ON LAND (\$ 600 VALUE/ACRE X 6%)	36.00
TOTAL FIXED COSTS	123.77
TOTAL COST, EXCEPT OVERHEAD AND MGT.	262.88

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	6.63
MANAGEMENT CHARGE	12.00
(\$ 2.00 X ESTIMATED YIELD)	
TOTAL OVERHEAD AND MANAGEMENT	18.63
TOTAL COST PER ACRE	281.51
TOTAL COST PER UNIT OF PRODUCTION	46.92
(BASED ON ESTIMATED YIELD)	

DESCRIPTION OF THE NON-IRRIGATED BENCHMARK FARM, NEBRASKA PANHANDLE

This farm is intended to be representative of summer-fallow winter wheat farms in the Panhandle area. Although wheat is the major crop, millet, and/or sunflowers may be substituted for some of the wheat acreage on some farms.

<u>"Typical" Farm Acreage</u>		<u>Machinery Inventory</u>	<u>List Price</u>
Acres of cropland	1600	180 hp 4 wd tractor	\$55,365
Acres of wheat	800	130 hp 2 wd tractor	35,531
Acres of fallow	800	Combine 20' with grain & pickup heads	58,188
Acres of millet	150	Plow - 12 bottom 18"	12,700
Acres of sunflowers	75	Oneway 20'	3,270
		Chisel 22'	7,532
		Rodweeder 40'	6,141
		Drill 24'	11,400
		Springtooth harrow 36'	3,400
		Field cultivator with harrow 36.5'	1,820
		Truck 250 bushel capacity	18,600
		Pickup	7,300
		Disc. 27½	13,178

ESTIMATED 1980 COSTS PER ACRE NEBRASKA PANHANDLE

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WINTER WHEAT, STUBBLE MULCH FALLOW

CROPLAND ACRES 1600.0
ACRES THIS CROP 800.0

EXPECTED YIELD PER ACRE 34.0
ANIMAL UNITS OF GRAZING 0.0

JOB	ACRES/ HOUR	PURCHASED INPUTS		MACHINE COSTS	
		AMOUNT	VALUE	VARIABLE	FIXED TOTAL
ONE-WAY DISC	10.20			1.13	1.52 2.65
CHISEL	11.33			1.49	1.84 3.34
CHISEL	11.33			1.49	1.84 3.34
ANHYDROUS APPLICATOR	11.45			0.86	0.85 1.71
(MACHINE RENTED, TRACTOR OWNED)					
NITROGEN (LBS. N)		40.00	4.80		4.80
BROADCAST SPREADER	16.00			0.61	0.61 1.23
(MACHINE RENTED, TRACTOR OWNED)					
PHOS (LBS. P205)		30.00	7.50		7.50
ROD WEEDER	18.18			0.91	1.28 2.18
ROD WEEDER	20.36			0.83	1.20 2.03
GRAIN DRILL	9.16			1.60	3.01 4.61
CERT. SEED		0.75	3.37		3.37
COMBINE, GRAIN HEAD	9.27			2.80	9.24 12.04
TRUCK	(CUSTOM OP.)			3.40	3.40
AUGER	10.00			0.26	0.33 0.59

CASH COSTS

PURCHASED INPUTS	15.67
VARIABLE MACHINERY COSTS	15.39
INTEREST ON OPERATING EXPENSE	2.39
(TOT. VARIABLE COSTS X 11.0 % X 0.7 YRS.)	
TOTAL CASH COSTS	33.46

LABOR

DIRECT LABOR	5.07
(0.8 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	38.53

FIXED COSTS

FIXED MACHINERY COSTS	21.72
TAXES ON LAND (\$ 500 VALUE/ACRE X 1% X 2)	10.00
INTEREST ON LAND (\$ 500 VALUE/ACRE X 6% X 2)	60.00
TOTAL FIXED COSTS	91.72
TOTAL COST, EXCEPT OVERHEAD AND MGT.	130.25

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	1.67
MANAGEMENT CHARGE	5.10
(\$ 0.15 X ESTIMATED YIELD)	
TOTAL OVERHEAD AND MANAGEMENT	6.77
TOTAL COST PER ACRE	137.02
TOTAL COST PER UNIT OF PRODUCTION	4.03
(BASED ON ESTIMATED YIELD)	

ESTIMATED 1980 COSTS PER ACRE, NEBRASKA PANHANDLE

WINTER WHEAT, BLACK FALLOW

CROPLAND ACRES	1600.0	EXPECTED YIELD PER ACRE	34.0
ACRES THIS CROP	800.0	ANIMAL UNITS OF GRAZING	0.0

JOB	ACRES/ HOUR	PURCHASED		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
MOLDBOARD FLOW	10.20			2.27	3.51	5.77
TANDEM DISC	16.50			1.42	3.07	4.49
FIELD CULTIVATOR	20.68			0.93	1.42	2.36
ANHYDROUS APPLICATOR	11.45			0.86	0.85	1.71
(MACHINE RENTED, TRACTOR OWNED)						
NITROGEN (LBS. N)		40.00	4.80			4.80
BROADCAST SPREADER	16.00			0.61	0.61	1.23
(MACHINE RENTED, TRACTOR OWNED)						
PHOS (LBS. P205)		30.00	7.50			7.50
FIELD CULTIVATOR	20.68			0.93	1.42	2.36
ROD WEEDER	18.18			0.91	1.28	2.18
ROD WEEDER	19.39			0.86	1.23	2.09
GRAIN DRILL	9.16			1.60	3.01	4.61
CERT. SEED		0.75	3.37			3.37
COMBINE, GRAIN HEAD	9.27			2.80	9.24	12.04
TRUCK	(CUSTOM OP.)			3.40		3.40
AUGER	10.00			0.26	0.33	0.59
CASH COSTS						
PURCHASED INPUTS				15.67		
VARIABLE MACHINERY COSTS				16.86		
INTEREST ON OPERATING EXPENSE				2.51		
(TOT. VARIABLE COSTS X 11.0 % X 0.7 YRS.)						
TOTAL CASH COSTS						35.04
LABOR						
DIRECT LABOR				4.97		
(0.8 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))						
TOTAL CASH COSTS & LABOR						40.01
FIXED COSTS						
FIXED MACHINERY COSTS				25.97		
TAXES ON LAND (\$ 500 VALUE/ACRE X 1% X 2)				10.00		
INTEREST ON LAND (\$ 500 VALUE/ACRE X 6% X 2)				60.00		
TOTAL FIXED COSTS						95.97
TOTAL COST, EXCEPT OVERHEAD AND MGT.						135.99
OVERHEAD AND MANAGEMENT						
OVERHEAD (TOTAL CASH COSTS X 5%)				1.75		
MANAGEMENT CHARGE				5.10		
(\$ 0.15 X ESTIMATED YIELD)						
TOTAL OVERHEAD AND MANAGEMENT						6.85
TOTAL COST PER ACRE						142.84
TOTAL COST PER UNIT OF PRODUCTION						4.20
(BASED ON ESTIMATED YIELD)						

ESTIMATED 1980 COSTS PER ACRE, NEBRASKA PANHANDLE

WINTER WHEAT, ECOFALLOW - CHEMICAL AND TILLAGE COMBINATION

CROPLAND ACRES	1600.0	EXPECTED YIELD PER ACRE	34.0
ACRES THIS CROP	200.0	ANIMAL UNITS OF GRAZING	0.0

JOB	ACRES/ HOUR	PURCHASED INPUTS		MACHINE COSTS	
		AMOUNT	VALUE	VARIABLE	FIXED TOTAL
NOBLE BLADE	9.27			1.50	2.20 3.70
BROADCAST SPREADER	15.00			0.65	0.65 1.31
(MACHINE RENTED, TRACTOR OWNED)					
46-46-0 (LBS.)		70.00	17.50		17.50
CHISEL	11.33			1.49	1.84 3.34
GRAIN DRILL	10.18			1.49	2.90 4.39
CERT. SEED		0.75	3.37		3.37
SPRAYER	(CUSTOM OP.)			2.25	2.25
RESIDUAL CHEM.		1.00	2.50		2.50
CONTACT CHEM.		0.25	5.00		5.00
X-77 SURFACTANT		1.00	0.30		0.30
COMBINE, GRAIN HEAD	(CUSTOM OP.)			11.40	11.40
TRUCK	(CUSTOM OP.)			3.40	3.40
AUGER	10.00			0.26	0.33 0.59
CASH COSTS					
PURCHASED INPUTS				28.67	
VARIABLE MACHINERY COSTS				22.46	
INTEREST ON OPERATING EXPENSE				3.94	
(TOT. VARIABLE COSTS X 11.0 % X 0.7 YRS.)					
TOTAL CASH COSTS					55.07
LABOR					
DIRECT LABOR				2.77	
(0.5 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))					
TOTAL CASH COSTS & LABOR					57.83
FIXED COSTS					
FIXED MACHINERY COSTS				7.93	
TAXES ON LAND (\$ 500 VALUE/ACRE X 1% X 2)				10.00	
INTEREST ON LAND (\$ 500 VALUE/ACRE X 6% X 2)				60.00	
TOTAL FIXED COSTS					77.93
TOTAL COST, EXCEPT OVERHEAD AND MGT.					135.76
OVERHEAD AND MANAGEMENT					
OVERHEAD (TOTAL CASH COSTS X 5%)				2.75	
MANAGEMENT CHARGE				5.10	
(\$ 0.15 X ESTIMATED YIELD)					
TOTAL OVERHEAD AND MANAGEMENT					7.85
TOTAL COST PER ACRE					143.61
TOTAL COST PER UNIT OF PRODUCTION					4.22
(BASED ON ESTIMATED YIELD)					

ESTIMATED 1980 COSTS PER ACRE, NEBRASKA PANHANDLE

MILLET

CROPLAND ACRES 1600.0
ACRES THIS CROP 150.0

EXPECTED YIELD PER ACRE 17.5
ANIMAL UNITS OF GRAZING 0.0

JOB	ACRES/ HOUR	PURCHASED INPUTS		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
MOLDBOARD PLOW	10.20			2.27	3.51	5.77
SPRING TOOTH HARROW	20.40			0.61	0.96	1.56
BROADCAST SPREADER	15.00			0.65	0.65	1.31
(MACHINE RENTED, TRACTOR OWNED)						
NITROGEN (LBS. N)		40.00	10.00			10.00
SPRING TOOTH HARROW	20.40			0.61	0.96	1.56
GRAIN DRILL	10.18			1.49	2.90	4.39
CERT. SEED		15.00	0.90			0.90
COMBINE, PICKUP	6.14			3.83	11.98	15.81
SELF-PROPELLED WINDROWER	(CUSTOM OP.)			6.50		6.50
TRUCK ALLOWANCE	7.50			2.03	5.10	7.13

CASH COSTS

PURCHASED INPUTS	10.90
VARIABLE MACHINERY COSTS	17.99
INTEREST ON OPERATING EXPENSE	2.22
(TOT. VARIABLE COSTS X 11.0 % X 0.7 YRS.)	
TOTAL CASH COSTS	31.11

LABOR

DIRECT LABOR	3.94
(0.7 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	35.05

FIXED COSTS

FIXED MACHINERY COSTS	26.05
TAXES ON LAND (\$ 500 VALUE/ACRE X 1%)	5.00
INTEREST ON LAND (\$ 500 VALUE/ACRE X 6%)	30.00
TOTAL FIXED COSTS	61.05
TOTAL COST, EXCEPT OVERHEAD AND MGT.	96.11

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	1.56
MANAGEMENT CHARGE	5.25
(\$ 0.30 X ESTIMATED YIELD)	
TOTAL OVERHEAD AND MANAGEMENT	6.81
TOTAL COST PER ACRE	102.91
TOTAL COST PER UNIT OF PRODUCTION	5.88
(BASED ON ESTIMATED YIELD)	

DESCRIPTION OF THE SOUTHWEST NEBRASKA BENCHMARK FARM

Data from the Northwest Kansas Farm Management Association 1976 Summary were used in developing the Southwest Nebraska benchmark farm. Members of farm management associations are usually above average managers and farm above average acreages.

"Typical" acreages of individual crops as well as the total acreage of a typical farm in the area are shown. Not all of these crops are grown on every farm every year. Thus, the sum of the acreages of individual crops shown here exceeds the total acreage of the farm.

The machinery inventory shown here is consistent with the crops and farm acreage described below. Machinery operations which are typically custom hired by farmers in this area are assumed to be custom hired in the enterprise budgets.

"Typical" Farm

Cropland acres	
Irrigated	370
Dryland	1,110
Acres in Grass	910

"Typical" Acres of Irrigated Crops:

Wheat	70
Corn, grain	260
Corn, silage	60
Grain sorghum	80
Sugar beets	215
Dry beans	110
Alfalfa	60

"Typical" Acres of Dryland Crops:

Wheat	475
Fallow	475
Grain sorghum	120
Alfalfa	50
Sorghum silage or hay	120

"Typical" sizes for livestock operations:

Beef cows	100
Sows farrowed (2x/yr)	26
Dairy cows	50
Beef feeders	120
Swine feeders	240

Machinery Inventory

Power Equipment:

80 hp tractor	\$27,102
125 hp tractor	35,490
110 hp diesel combine with 18' platform & 6-row 30" cornhead	65,701
3/4 ton pickup	8,450
Truck with 250 bu. grain box	18,500
14' self-propelled swather with conditioner	18,230

Other Machinery:

20' one-way	2,398
14' flail stalk-shredder	4,540
21' heavy duty tandem disk	8,090
6-row 30" corn planter	6,843
6-row 30" cultivator	2,940
10-row sprayer with 500 gal. tank	1,505
8" auger, 52' long	1,600
10" drill, 24' wide	4,850
giant round baler	8,458
18' chisel	3,200

ESTIMATED 1980 COSTS PER CROP ACRE SOUTHWEST NEBRASKA

CORN FOR GRAIN, GRAVITY IRRIGATED, ELECTRICITY, 225 FT. HEAD

CROPLAND ACRES	1480.0	EXPECTED YIELD PER ACRE	130.0
ACRES THIS CROP	160.0	ANIMAL UNITS OF GRAZING	2.5

JOB	ACRES/ HOUR	PURCHASED		MACHINE COSTS	
		INPUTS AMOUNT	VALUE	VARIABLE	FIXED TOTAL
STALK SHREDDER	7.21			1.46	2.79 4.24
TANDEM DISC	10.63			1.28	2.19 3.46
TANDEM DISC	10.63			1.28	2.19 3.46
ANHYDROUS APPLICATOR	6.87			1.29	1.19 2.48
NH3 NITROGEN		140.00	16.80		16.80
PLANTER (FERT., HERB., ETC.)	4.95			2.58	3.63 6.21
SEED, 80000 BAG		0.33	18.15		18.15
LIQUID 10-34-0		0.05	11.50		11.50
ZINC SULFATE		4.00	3.60		3.60
HERBICIDE BAND		1.00	6.00		6.00
ROOTWORM		1.00	8.00		8.00
ROW CROP CULTIVATOR	5.35			2.04	2.38 4.42
ROW CROP CULTIVATOR	5.35			2.04	2.38 4.42
COMBINE, CORN HEAD	3.13			5.74	10.95 16.69
DRIER (CUSTOM OP.)				18.70	18.70
DRIER		0.0	0.0		0.0
15 IRRIGATION	0.67			38.45	60.22 98.67
HAUL	2.00			6.00	5.00 11.00
AUGER	2.00			0.50	0.60 1.10
CASH COSTS					
PURCHASED INPUTS				64.05	
VARIABLE MACHINERY COSTS				81.33	
INTEREST ON OPERATING EXPENSE				8.00	
(TOT. VARIABLE COSTS X 11.0 % X 0.5 YRS.)					
TOTAL CASH COSTS					150.38
LABOR					
DIRECT LABOR				23.21	
(3.9 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))					
TOTAL CASH COSTS & LABOR					176.58
FIXED COSTS					
FIXED MACHINERY COSTS				93.53	
TAXES ON LAND (\$ 650 VALUE/ACRE X 1%)				6.50	
INTEREST ON LAND (\$ 650 VALUE/ACRE X 6%)				39.00	
TOTAL FIXED COSTS					139.03
TOTAL COST, EXCEPT OVERHEAD AND MGT.					315.61
OVERHEAD AND MANAGEMENT					
OVERHEAD (TOTAL CASH COSTS X 5%)				7.67	
MANAGEMENT CHARGE				13.00	
(\$ 0.10 X ESTIMATED YIELD)					
TOTAL OVERHEAD AND MANAGEMENT					20.67
TOTAL COST PER ACRE					336.28
TOTAL COST PER UNIT OF PRODUCTION					2.59
(BASED ON ESTIMATED YIELD)					

ESTIMATED 1980 COSTS PER CROP ACRE, SOUTHWEST NEBRASKA

CORN SILAGE, GRAVITY IRRIGATED, ELECTRICITY, 225 FT. HEAD

CROPLAND ACRES 1480.0
ACRES THIS CROP 60.0EXPECTED YIELD PER ACRE 20.0
ANIMAL UNITS OF GRAZING 0.0

JOB	ACRES/ HOUR	PURCHASED		MACHINE COSTS	
		AMOUNT	VALUE	VARIABLE	FIXED TOTAL
STALK SHREDDER	7.21			1.46	2.79 4.24
TANDEM DISC	10.63			1.28	2.19 3.46
TANDEM DISC	10.63			1.28	2.19 3.46
ANHYDROUS APPLICATOR	6.87			1.29	1.19 2.48
NITROGEN, NH ₃		160.00	19.20		19.20
PLANTER (FERT., HERB., ETC)	4.95			2.58	3.63 6.21
SEED, 80000 BAG		0.33	18.31		18.31
LIQUID 10-34 0		0.05	11.50		11.50
ZINC SULFATE		4.00	3.60		3.60
HERBICIDE BAND		1.00	6.00		6.00
ROOTWORM		1.00	8.00		8.00
ROW CROP CULTIVATOR	5.35			2.04	2.38 4.42
ROW CROP CULTIVATOR	5.35			2.04	2.38 4.42
FORAGE CHOPPER	2.18			13.88	32.84 46.72
15' IRRIGATION	0.67			38.45	60.22 98.67
HAUL AND PACK	0.50			10.00	10.00 20.00
CASH COSTS					
PURCHASED INPUTS				66.61	
VARIABLE MACHINERY COSTS				74.27	
INTEREST ON OPERATING EXPENSE				7.75	
(TOT. VARIABLE COSTS X 11.0 % X 0.5 YRS.)					
TOTAL CASH COSTS					148.64
LABOR					
DIRECT LABOR				30.04	
(5.0 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))					
TOTAL CASH COSTS & LABOR					178.67
FIXED COSTS					
FIXED MACHINERY COSTS				119.82	
TAXES ON LAND (\$ 650 VALUE/ACRE X 1%)				6.50	
INTEREST ON LAND (\$ 650 VALUE/ACRE X 6%)				39.00	
TOTAL FIXED COSTS					165.32
TOTAL COST, EXCEPT OVERHEAD AND MGT.					343.99
OVERHEAD AND MANAGEMENT					
OVERHEAD (TOTAL CASH COSTS X 5%)				7.43	
MANAGEMENT CHARGE				14.00	
(\$ 0.70 X ESTIMATED YIELD)					
TOTAL OVERHEAD AND MANAGEMENT					21.43
TOTAL COST PER ACRE					365.42
TOTAL COST PER UNIT OF PRODUCTION					18.27
(BASED ON ESTIMATED YIELD)					

ESTIMATED 1980 COSTS PER CROP ACRE, SOUTHWEST NEBRASKA

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CORN FOR GRAIN, CENTER-PIVOT IRRIGATED, DIESEL, 325 HEAD

CROPLAND ACRES 1480.0
ACRES THIS CROP 130.0

EXPECTED YIELD PER ACRE 130.0
ANIMAL UNITS OF GRAZING 2.5

JOB	ACRES/ HOUR	PURCHASED INPUTS		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
TANDEM DISC	10.63			1.28	2.19	3.46
BROADCAST SPREADER	8.50			0.76	0.73	1.48
SPREADER RENT		1.00	2.00			2.00
SUL FO MAG		100.00	6.00			6.00
NITROGEN DRY		60.00	13.20			13.20
TANDEM DISC	10.63			1.28	2.19	3.46
BROADCAST SPREADER	8.50			0.76	0.73	1.48
SPREADER RENT		1.00	2.00			2.00
HERBICIDE		1.00	12.00			12.00
ANHYDROUS APPLICATOR	6.87			1.29	1.19	2.48
NH3 NITROGEN		100.00	12.00			12.00
PLANTER (FERT., HERB., ETC)	4.95			2.58	3.63	6.21
SEED, 80000 BAG		0.33	18.15			18.15
LIQUID 10 34 0		0.05	11.50			11.50
ZINC SULFATE		4.00	3.60			3.60
COMBINE, CORN HEAD	3.13			5.43	9.80	15.24
DRIER	(CUSTOM OP.)			18.70		18.70
15 IRRIGATION	2.00			74.25	60.13	134.38
HAUL	2.00			6.00	5.00	11.00
AUGER	2.00			0.50	0.60	1.10

CASH COSTS

PURCHASED INPUTS	80.45
VARIABLE MACHINERY COSTS	112.81
INTEREST ON OPERATING EXPENSE	10.63
(TOT. VARIABLE COSTS X 11.0 % X 0.5 YRS.)	
TOTAL CASH COSTS	203.89

LABOR

DIRECT LABOR	15.55
(2.6 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	219.43

FIXED COSTS

FIXED MACHINERY COSTS	86.19
TAXES ON LAND (\$ 500 VALUE/ACRE X 1%)	5.00
INTEREST ON LAND (\$ 500 VALUE/ACRE X 6%)	30.00
TOTAL FIXED COSTS	121.19
TOTAL COST, EXCEPT OVERHEAD AND MGT.	340.62

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	10.19
MANAGEMENT CHARGE	13.00
(\$ 0.10 X ESTIMATED YIELD)	
TOTAL OVERHEAD AND MANAGEMENT	23.19
TOTAL COST PER ACRE	363.82
TOTAL COST PER UNIT OF PRODUCTION	2.80
(BASED ON ESTIMATED YIELD)	

ESTIMATED 1980 COSTS PER CROP ACRE, SOUTHWEST NEBRASKA

CORN SILAGE, CENTER PIVOT IRRIGATED, DIESFL, 325 FT. HEAD.

CROPLAND ACRES 1480.0
ACRES THIS CROP 60.0

EXPECTED YIELD PER ACRE 18.0
ANIMAL UNITS OF GRAZING 0.0

JOB	ACRES/ HOUR	PURCHASED		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
TANDEM DISC	10.63			1.28	2.19	3.46
BROADCAST SPREADER	8.50			0.76	0.73	1.48
SPREADER RENT		1.00	2.00			2.00
SUL-PO-MAG		100.00	6.00			6.00
NITROGEN DRY		60.00	13.20			13.20
TANDEM DISC	10.63			1.28	2.19	3.46
BROADCAST SPREADER	8.50			0.76	0.73	1.48
SPREADER RENT		1.00	2.00			2.00
HERBICIDE		1.00	12.00			12.00
ANHYDROUS APPLICATOR	6.87			1.29	1.19	2.48
NH3 NITROGEN		100.00	12.00			12.00
PLANTER (FERT., HERB., ETC)	4.95			2.58	3.63	6.21
SEED, 80000 BAG		0.33	18.15			18.15
LIQUID 10-34-0		0.05	11.50			11.50
ZINC SULFATE		4.00	3.60			3.60
FORAGE CHOPPER	2.18			7.03	12.29	19.32
15' IRRIGATION	2.00			74.25	60.13	134.38
HAUL AND PACK	0.50			10.00	10.00	20.00

CASH COSTS

PURCHASED INPUTS	80.45
VARIABLE MACHINERY COSTS	99.21
INTEREST ON OPERATING EXPENSE	9.88
(TOT. VARIABLE COSTS X 11.0 % X 0.5 YRS.)	
TOTAL CASH COSTS	189.54

LABOR

DIRECT LABOR	22.38
(3.7 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	211.91

FIXED COSTS

FIXED MACHINERY COSTS	93.08
TAXES ON LAND (\$ 500 VALUE/ACRE X 1%)	5.00
INTEREST ON LAND (\$ 500 VALUE/ACRE X 6%)	30.00
TOTAL FIXED COSTS	128.08
TOTAL COST, EXCEPT OVERHEAD AND MGT.	339.99

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	9.48
MANAGEMENT CHARGE	1.80
(\$ 0.10 X ESTIMATED YIELD)	
TOTAL OVERHEAD AND MANAGEMENT	11.28
TOTAL COST PER ACRE	351.27
TOTAL COST PER UNIT OF PRODUCTION	19.51
(BASED ON ESTIMATED YIELD)	

ESTIMATED 1980 COSTS PER CROP ACRE, SOUTHWEST NEBRASKA

PINTO BEANS, CENTER PIVOT IRRIGATED, DIESEL, 325' HEAD

CROPLAND ACRES	1480.0	EXPECTED YIELD PER ACRE	18.0
ACRES THIS CROP	130.0	ANIMAL UNITS OF GRAZING	0.0

JOB	ACRES/ HOUR	PURCHASED INPUTS		MACHINE COSTS	
		AMOUNT	VALUE	VARIABLE	FIXED TOTAL
TANDEM DISC	10.63			1.28	2.19 3.46
BROADCAST SPREADER	8.50			0.76	0.73 1.48
SPREADER RENT		1.00	2.00		2.00
SUL-PO-MAG		100.00	6.00		6.00
TANDEM DISC	10.63			1.28	2.19 3.46
BROADCAST SPREADER	8.50			0.76	0.73 1.48
SPREADER RENT		1.00	2.00		2.00
HERBICIDE		1.00	15.00		15.00
PLANTER (FERT., HERB., ETC)	4.95			41.63	77.55 *****
SEED 60 LBS		0.60	22.80		22.80
10-34-0 STARTER		0.05	11.50		11.50
ZINC SULFATE		4.00	3.60		3.60
ROTARY HOE	17.92			0.46	1.58 2.04
ROW CROP CULTIVATOR	5.35			2.04	2.38 4.42
BEANCUTTER	5.15			2.00	3.51 5.51
WINDROWER	9.60			2.16	5.14 7.30
COMBINE, PICKUP	4.95			3.34	6.34 9.67
10 IRRIGATION	2.00			49.27	60.13 109.40
HAUL	6.00			2.00	2.50 4.50

CASH COSTS

PURCHASED INPUTS	62.90
VARIABLE MACHINERY COSTS	106.95
INTEREST ON OPERATING EXPENSE	9.34
(TOT. VARIABLE COSTS X 11.0 % X 0.5 YRS.)	
TOTAL CASH COSTS	179.19

LABOR

DIRECT LABOR	12.21
(2.0 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	191.40

FIXED COSTS

FIXED MACHINERY COSTS	164.97
TAXES ON LAND (\$ 400 VALUE/ACRE X 1%)	4.00
INTEREST ON LAND (\$ 400 VALUE/ACRE X 6%)	24.00
TOTAL FIXED COSTS	192.97
TOTAL COST, EXCEPT OVERHEAD AND MGT.	384.37

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	8.96
MANAGEMENT CHARGE	13.50
(\$ 0.75 X ESTIMATED YIELD)	
TOTAL OVERHEAD AND MANAGEMENT	22.46
TOTAL COST PER ACRE	406.83
TOTAL COST PER UNIT OF PRODUCTION	22.60
(BASED ON ESTIMATED YIELD)	

ESTIMATED 1980 COSTS PER CROP ACRE, SOUTHWEST NEBRASKA

FALL SEED ALFALFA, CENTER-PIVOT IRRIG., DIESEL 325 FT. HEAD

CROPLAND ACRES	1480.0	EXPECTED YIELD PER ACRE	1.0
ACRES THIS CROP	130.0	ANIMAL UNITS OF GRAZING	0.0

JOB	ACRES/ HOUR	PURCHASED INPUTS		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
TANDEM DISC	10.63			1.28	2.19	3.46
BROADCAST SPREADER	8.50			0.76	0.73	1.48
SPREADER RENT		1.00	2.00			2.00
P205		60.00	15.00			15.00
TANDEM DISC	10.63			1.28	2.19	3.46
SPIKE TOOTH HARROW	12.45			0.52	1.02	1.54
SPIKE TOOTH HARROW	12.45			0.52	1.02	1.54
ROLLER OR PACKER	8.73			0.96	8.77	9.73
GRAIN DRILL	4.22			1.52	1.47	2.99
GRASS DRILL RENT		1.00	5.00			5.00
SEED		12.00	27.00			27.00
5 IRRIGATION	6.00			24.75	0.0	24.75

CASH COSTS

PURCHASED INPUTS	49.00
VARIABLE MACHINERY COSTS	31.58
INTEREST ON OPERATING EXPENSE	2.22
(TOT. VARIABLE COSTS X 11.0 % X 0.2 YRS.)	
TOTAL CASH COSTS	82.80

LABOR

DIRECT LABOR	5.91
(1.0 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	88.71

FIXED COSTS

FIXED MACHINERY COSTS	17.37
TAXES ON LAND (\$ 0 VALUE/ACRE X 1%)	0.0
INTEREST ON LAND (\$ 0 VALUE/ACRE X 6%)	0.0
TOTAL FIXED COSTS	17.37
TOTAL COST, EXCEPT OVERHEAD AND MGT.	106.07

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	4.14
MANAGEMENT CHARGE (\$ 0.0 X ESTIMATED YIELD)	0.0
TOTAL OVERHEAD AND MANAGEMENT	4.14
TOTAL COST PER ACRE	110.21
TOTAL COST PER UNIT OF PRODUCTION (BASED ON ESTIMATED YIELD)	110.21

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ESTIMATED 1980 COSTS PER CROP ACRE, SOUTHWEST NEBRASKA

ALFALFA HAY, CENTER PIVOT IRRIGATED, DIESEL, 325 FT. HEAD

CROPLAND ACRES	1480.0	EXPECTED YIELD PER ACRE	5.5
ACRES THIS CROP	130.0	ANIMAL UNITS OF GRAZING	0.0

JOB	ACRES/ HOUR	PURCHASED		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
SELF-PROPELLED WINDROWER	5.92			2.28	4.77	7.05
0 010		0.0	0.0			0.0
BALER, GIANT	15.80			0.89	2.60	3.49
TWINE		2.00	0.30			0.30
SELF-PROPELLED WINDROWER	5.92			2.64	4.77	7.40
BALER, GIANT	15.80			0.89	2.60	3.49
TWINE		2.00	0.30			0.30
SELF-PROPELLED WINDROWER	5.92			2.64	4.77	7.40
BALER, GIANT	15.80			0.89	2.60	3.49
TWINE		2.00	0.30			0.30
SELF-PROPELLED WINDROWER	5.92			2.64	4.79	7.44
BALER, GIANT	15.80			0.89	2.60	3.49
TWINE		2.00	0.30			0.30
BROADCAST SPREADER	(CUSTOM OP.)			2.50		2.50
P205		40.00	10.00			10.00
18 IRRIGATION	1.50			89.10	60.13	149.23
MOVE BALES	0.80			6.30	1.75	8.05

CASH COSTS

PURCHASED INPUTS	11.20
VARIABLE MACHINERY COSTS	111.68
INTEREST ON OPERATING EXPENSE	13.52
(TOT. VARIABLE COSTS X 11.0 % X 1.0 YRS.)	
TOTAL CASH COSTS	136.39

LABOR

DIRECT LABOR	17.07
(2.8 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	153.47

SHARE OF SEEDING COSTS

18.37

FIXED COSTS

FIXED MACHINERY COSTS	91.37
TAXES ON LAND (\$ 500 VALUE/ACRE X 1%)	5.00
INTEREST ON LAND (\$ 500 VALUE/ACRE X 6%)	30.00
TOTAL FIXED COSTS	144.74
TOTAL COST, EXCEPT OVERHEAD AND MGT.	298.21

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	6.82
MANAGEMENT CHARGE	12.37
(\$ 2.25 X ESTIMATED YIELD)	
TOTAL OVERHEAD AND MANAGEMENT	19.19
TOTAL COST PER ACRE	317.40
TOTAL COST PER UNIT OF PRODUCTION	57.71
(BASED ON ESTIMATED YIELD)	

ESTIMATED 1980 COSTS PER ACRE SOUTHWEST NEBRASKA

FALL SEED IRRIG. GRASS, PIVOT IRRIG., ELECTRIC, 325 FT. HEAD

CROPLAND ACRES	1480.0	EXPECTED YIELD PER ACRE	1.0
ACRES THIS CROP	130.0	ANIMAL UNITS OF GRAZING	0.0

JOB	ACRES/ HOUR	PURCHASED INPUTS		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
TANDEM DISC	10.63			1.28	2.19	3.46
BROADCAST SPREADER	8.50			0.76	0.73	1.48
SPREADER RENT		1.00	2.00			2.00
P205		50.00	12.50			12.50
TANDEM DISC	10.63			1.28	2.19	3.46
SPIKE TOOTH HARROW	12.45			0.52	1.02	1.54
SPIKE TOOTH HARROW	12.45			0.52	1.02	1.54
ROLLER OR PACKER	8.73			0.96	8.77	9.73
GRAIN DRILL	4.22			1.52	1.47	2.99
GRASS DRILL RENT		1.00	5.00			5.00
SEED MIX		18.00	36.00			36.00
DRY NITROGEN		20.00	4.40			4.40
4 IRRIG.	6.00			17.80	0.0	17.80

CASH COSTS

PURCHASED INPUTS	59.90
VARIABLE MACHINERY COSTS	24.63
INTEREST ON OPERATING EXPENSE	2.32
(TOT. VARIABLE COSTS X 11.0 % X 0.2 YRS.)	
TOTAL CASH COSTS	86.86

LABOR

DIRECT LABOR	5.91
(1.0 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	92.76

FIXED COSTS

FIXED MACHINERY COSTS	17.37
TAXES ON LAND (\$ 0 VALUE/ACRE X 1%)	0.0
INTEREST ON LAND (\$ 0 VALUE/ACRE X 6%)	0.0
TOTAL FIXED COSTS	17.37
TOTAL COST, EXCEPT OVERHEAD AND MGT.	110.13

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	4.34
MANAGEMENT CHARGE	0.0
(\$ 0.0 X ESTIMATED YIELD)	
TOTAL OVERHEAD AND MANAGEMENT	4.34
TOTAL COST PER ACRE	114.47
TOTAL COST PER UNIT OF PRODUCTION	114.47
(BASED ON ESTIMATED YIELD)	

ESTIMATED 1980 COSTS PER CROP ACRE, SOUTHWEST NEBRASKA

IRRIGATED PASTURE, CP IRRIGATED, ELECTRIC, 325 FT. HEAD

CROPLAND ACRES 1480.0
ACRES THIS CROP 130.0

EXPECTED YIELD PER ACRE 0.0
ANIMAL UNITS OF GRAZING 12.0

JOB	ACRES/ HOUR	PURCHASED		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
18 IN. IRRIG.	2.00			72.40	53.38	125.78
220 LBS. NITRO.	60.00	44.00		0.0		44.00
FENCING	12.00			0.30	0.50	0.80
ROTATE CATTLE	6.00			0.10	0.10	0.20

CASH COSTS

PURCHASED INPUTS	44.00
VARIABLE MACHINERY COSTS	72.00
INTEREST ON OPERATING EXPENSE	12.85
(TOT. VARIABLE COSTS X 11.0 % X 1.0 YRS.)	
TOTAL CASH COSTS	129.65

LABOR

DIRECT LABOR	4.60
(0.8 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	134.25

SHARE OF SEEDING COSTS

16.37

FIXED COSTS

FIXED MACHINERY COSTS	53.98
TAXES ON LAND (\$ 500 VALUE/ACRE X 1%)	5.00
INTEREST ON LAND (\$ 500 VALUE/ACRE X 6%)	30.00
TOTAL FIXED COSTS	105.35
TOTAL COST, EXCEPT OVERHEAD AND MGT.	239.60

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	6.48
MANAGEMENT CHARGE	13.20
(\$ 1.10 X ESTIMATED YIELD)	
TOTAL OVERHEAD AND MANAGEMENT	19.68
TOTAL COST PER ACRE	259.28
TOTAL COST PER UNIT OF PRODUCTION	21.61
(BASED ON ESTIMATED YIELD)	

ESTIMATED 1980 COSTS PER CROP ACRE, SOUTHWEST NEBRASKA

WHEAT, STUBBLE MULCH FALLOW VIA TILLAGE

CROPLAND ACRES	1480.0	EXPECTED YIELD PER ACRE	42.0
ACRES THIS CROP	475.0	ANIMAL UNITS OF GRAZING	0.0

JOB	ACRES/ HOUR	PURCHASED INPUTS		MACHINE COSTS	
		AMOUNT	VALUE	VARIABLE	FIXED TOTAL
CHISEL	9.16			1.07	0.80 1.86
CHISEL	9.16			1.07	0.80 1.86
CHISEL	9.16			1.07	0.80 1.86
CHISEL	9.16			1.07	0.80 1.86
ROD WEEDER	14.55			0.72	0.72 1.44
ROD WEEDER	14.55			0.72	0.72 1.44
ANHYDROUS APPLICATOR	8.84			1.00	0.94 1.94
NH3 NITROGEN		40.00	4.80		4.80
GRAIN DRILL	7.03			1.91	3.53 5.44
SEED		1.00	4.50		4.50
18-46-0		40.00	5.60		5.60
COMBINE, GRAIN HEAD	4.05			4.06	7.76 11.82
HAUL	6.00			2.20	2.00 4.20
AUGER	6.00			0.25	0.30 0.55

CASH COSTS

PURCHASED INPUTS	14.90
VARIABLE MACHINERY COSTS	15.13
INTEREST ON OPERATING EXPENSE	3.30
(TOT. VARIABLE COSTS X 11.0 % X 1.0 YRS.)	
TOTAL CASH COSTS	33.34

LABOR

DIRECT LABOR	8.46
(1.4 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	41.79

FIXED COSTS

FIXED MACHINERY COSTS	19.16
TAXES ON LAND (\$ 400 VALUE/ACRE X 1% X 2)	8.00
INTEREST ON LAND (\$ 400 VALUE/ACRE X 6% X 2)	48.00
TOTAL FIXED COSTS	75.16
TOTAL COST, EXCEPT OVERHEAD AND MGT.	116.96

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	1.67
MANAGEMENT CHARGE	6.30
(\$ 0.15 X ESTIMATED YIELD)	
TOTAL OVERHEAD AND MANAGEMENT	7.97
TOTAL COST PER ACRE	124.92
TOTAL COST PER UNIT OF PRODUCTION	2.97
(BASED ON ESTIMATED YIELD)	

ESTIMATED 1980 COSTS PER CROP ACRE, SOUTHWEST NEBRASKA

WHEAT, CLEAN-TILL FALLOW

CROPLAND ACRES 1480.0
ACRES THIS CROP 475.0

EXPECTED YIELD PER ACRE 37.0
ANIMAL UNITS OF GRAZING 0.0

JOB	ACRES/ HOUR	PURCHASED INPUTS		MACHINE COSTS	
		AMOUNT	VALUE	VARIABLE	FIXED TOTAL
ONE-WAY DISC	9.60			1.03	1.14 2.17
CHISEL	9.16			1.07	0.80 1.86
CHISEL	9.16			1.07	0.80 1.86
CHISEL	9.16			1.07	0.80 1.86
ROD WEEDER	14.55			0.72	0.72 1.44
ROD WEEDER	14.55			0.72	0.72 1.44
ANHYDROUS APPLICATOR	8.84			1.00	0.94 1.94
NH3 NITROGEN		40.00	4.80		4.80
GRAIN DRILL	7.03			1.91	3.53 5.44
SEED		1.00	4.50		4.50
18-46-0		40.00	5.80		5.80
COMBINE, GRAIN HEAD	4.05			4.06	7.76 11.82
HAUL	6.00			2.00	2.00 4.00
AUGER	6.00			0.25	0.30 0.55

CASH COSTS

PURCHASED INPUTS	15.10
VARIABLE MACHINERY COSTS	14.89
INTEREST ON OPERATING EXPENSE	3.30
(TOT. VARIABLE COSTS X 11.0 % X 1.0 YRS.)	
TOTAL CASH COSTS	33.29

LABOR

DIRECT LABOR	8.43
(1.4 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	41.72

FIXED COSTS

FIXED MACHINERY COSTS	19.50
TAXES ON LAND (\$ 400 VALUE/ACRE X 1% X 2)	8.00
INTEREST ON LAND (\$ 400 VALUE/ACRE X 6% X 2)	48.00
TOTAL FIXED COSTS	75.50
TOTAL COST, EXCEPT OVERHEAD AND MGT.	117.22

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	1.66
MANAGEMENT CHARGE	5.55
(\$ 0.15 X ESTIMATED YIELD)	
TOTAL OVERHEAD AND MANAGEMENT	7.21
TOTAL COST PER ACRE	124.43
TOTAL COST PER UNIT OF PRODUCTION	3.36
(BASED ON ESTIMATED YIELD)	

ESTIMATED 1980 COSTS PER CROP ACRE, SOUTHWEST NEBRASKA

WHEAT, ECO-FALLOW, FOLLOWED BY CORN IN 3-YR. SYSTEM

CROPLAND ACRES 1480.0
ACRES THIS CROP 370.0EXPECTED YIELD PER ACRE 42.0
ANIMAL UNITS OF GRAZING 0.0

JOB	ACRES/ HOUR	PURCHASED			
		AMOUNT	VALUE	MACHINE COSTS VARIABLE FIXED	TOTAL
CHISEL	9.16			1.17 0.96	2.12
CHISEL	9.16			1.17 0.96	2.12
CHISEL	9.16			1.17 0.96	2.12
ANHYDROUS APPLICATOR	8.84			1.00 0.94	1.94
NH3 NITROGEN		50.00	6.00		6.00
ROD WEEDER	14.55			0.82 0.93	1.74
ROD WEEDER	14.55			0.82 0.93	1.74
GRAIN DRILL	3.52			2.33 3.62	5.95
SEED		1.00	4.50		4.50
18-46-0		50.00	7.25		7.25
COMBINE, GRAIN HEAD	4.05			4.18 8.28	12.45
HAUL	6.00			2.20 2.00	4.20
AUGER	6.00			0.25 0.30	0.55

CASH COSTS

PURCHASED INPUTS	17.75
VARIABLE MACHINERY COSTS	15.10
INTEREST ON OPERATING EXPENSE (TOT. VARIABLE COSTS X 11.0 % X 1.0 YRS.)	3.61
TOTAL CASH COSTS	36.46

LABOR

DIRECT LABOR	8.66
(1.4 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	45.12

FIXED COSTS

FIXED MACHINERY COSTS	19.86
TAXES ON LAND (\$ 400 VALUE/ACRE X 1% X 2)	8.00
INTEREST ON LAND (\$ 400 VALUE/ACRE X 6% X 2)	48.00
TOTAL FIXED COSTS	75.86
TOTAL COST, EXCEPT OVERHEAD AND MGT.	120.97

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	1.82
MANAGEMENT CHARGE (\$ 0.15 X ESTIMATED YIELD)	6.30
TOTAL OVERHEAD AND MANAGEMENT	8.12
TOTAL COST PER ACRE	129.10
TOTAL COST PER UNIT OF PRODUCTION (BASED ON ESTIMATED YIELD)	3.07

ESTIMATED 1980 COSTS PER CROP ACRE, SOUTHWEST NEBRASKA

CORN, ECO-FALLOW, FOLLOWS WHEAT IN 3-YEAR SYSTEM

CROPLAND ACRES 1480.0
ACRES THIS CROP 370.0EXPECTED YIELD PER ACRE 65.0
ANIMAL UNITS OF GRAZING 0.0

JOB	ACRES/ HOUR	PURCHASED INPUTS		MACHINE COSTS		
		AMOUNT	VALUE	VARIABLE	FIXED	TOTAL
PLANTER (FERT., HERB., ETC.)	4.95			2.58	3.63	6.21
SEED		0.20	11.00			11.00
10-34-0		70.00	8.05			8.05
HERBICIDE		2.00	8.00			8.00
ANHYDROUS APPLICATOR	8.84			1.03	1.05	2.08
NH3 NITROGEN		65.00	7.80			7.80
COMBINE-CORN HEAD	3.13			6.19	12.97	19.17
SPRAYER	(CUSTOM OP.)			3.50		3.50
ATR. PAR. ON STUBB		1.00	16.00			16.00
HAUL	4.00			3.00	2.50	5.50
AUGER	4.00			0.30	0.30	0.60

CASH COSTS

PURCHASED INPUTS	50.85
VARIABLE MACHINERY COSTS	16.60
INTEREST ON OPERATING EXPENSE	5.56
(TOT. VARIABLE COSTS X 11.0 % X 0.7 YRS.)	
TOTAL CASH COSTS	73.02

LABOR

DIRECT LABOR	6.81
(1.1 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	79.83

FIXED COSTS

FIXED MACHINERY COSTS	20.46
TAXES ON LAND (\$ 400 VALUE/ACRE X 1%)	4.00
INTEREST ON LAND (\$ 400 VALUE/ACRE X 6%)	24.00
TOTAL FIXED COSTS	48.46
TOTAL COST, EXCEPT OVERHEAD AND MGT.	128.29

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	3.65
MANAGEMENT CHARGE	6.50
(\$ 0.10 X ESTIMATED YIELD)	
TOTAL OVERHEAD AND MANAGEMENT	10.15
TOTAL COST PER ACRE	138.44
TOTAL COST PER UNIT OF PRODUCTION	2.13
(BASED ON ESTIMATED YIELD)	

ESTIMATED 1980 COSTS PER CROP ACRE, SOUTHWEST NEBRASKA

GRAIN SORGHUM, NON-IRRIGATED

CROPLAND ACRES 1480.0 EXPECTED YIELD PER ACRE 40.0
ACRES THIS CROP 80.0 ANIMAL UNITS OF GRAZING 1.0

JOB	ACRES/ HOUR	PURCHASED INPUTS		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
TANDEM DISC	10.63			1.28	2.19	3.46
TANDEM DISC	10.63			1.28	2.19	3.46
SPIKE TOOTH HARROW	12.45			0.52	1.02	1.54
ANHYDROUS APPLICATOR	8.84			1.03	1.05	2.08
NH3 NITROGEN		40.00	4.80			4.80
PLANTER (FERT., HERB., ETC)	4.95			2.58	3.63	6.21
SEED		5.00	2.50			2.50
BAND HERBICIDE		1.00	6.00			6.00
ROW CROP CULTIVATOR	5.35			2.04	2.38	4.42
COMBINE GRAIN HEAD	4.05			4.06	7.76	11.82
SPRAYER (CUSTOM OP.)				5.50		5.50
AERIAL GREENBUG		0.0	0.0			0.0
HAUL	6.00			1.75	1.60	3.35
AUGER	6.00			0.25	0.30	0.55

CASH COSTS

PURCHASED INPUTS	13.30
VARIABLE MACHINERY COSTS	20.28
INTEREST ON OPERATING EXPENSE	1.85
(TOT. VARIABLE COSTS X 11.0 % X 0.5 YRS.)	
TOTAL CASH COSTS	35.42

LABOR

DIRECT LABOR	8.10
(1.4 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	43.53

FIXED COSTS

FIXED MACHINERY COSTS	22.12
TAXES ON LAND (\$ 400 VALUE/ACRE X 1%)	4.00
INTEREST ON LAND (\$ 400 VALUE/ACRE X 6%)	24.00
TOTAL FIXED COSTS	50.12
TOTAL COST, EXCEPT OVERHEAD AND MGT.	93.65

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	1.77
MANAGEMENT CHARGE (\$ 0.10 X ESTIMATED YIELD)	4.00
TOTAL OVERHEAD AND MANAGEMENT	5.77
TOTAL COST PER ACRE	99.42
TOTAL COST PER UNIT OF PRODUCTION (BASED ON ESTIMATED YIELD)	2.49

Note that the total cost per acre shown above will not be equal to the total cost per acre available for grain production on a vast number of possible acreage combinations. The cost should be based on the actual acreage available for grain production on this ranch.

Other jobs that may be necessary for crop production on this "typical" ranch for which machinery is not owned will be done with custom hire.

ESTIMATED 1980 COSTS PER CROP ACRE, SOUTHWEST NEBRASKA

CANE HAY, NON-IRRIGATED

CROPLAND ACRES 1480.0
ACRES THIS CROP 75.0

EXPECTED YIELD PER ACRE 3.0
ANIMAL UNITS OF GRAZING 0.0

JOB	ACRES/ HOUR	PURCHASED		MACHINE COSTS	
		AMOUNT	VALUE	VARIABLE	FIXED TOTAL
TANDEM DISC	10.63			1.28	2.19 3.46
TANDEM DISC	10.63			1.28	2.19 3.46
SPIKE TOOTH HARROW	12.45			0.52	1.17 1.69
ANHYDROUS APPLICATOR	6.87			1.29	1.19 2.48
NH3 NITROGEN		40.00	4.80		
GRAIN DRILL	3.52			2.12	2.82 4.93
SEED		15.00	5.25		
SELF-PROPELLED WINDROWER	5.92			2.76	6.20 8.96
BALER, GIANT	15.80			1.04	3.26 4.30
TWINE		1.50	0.22		
MOVE BALES	4.00			3.00	1.50 4.50

CASH COSTS

PURCHASED INPUTS	10.27
VARIABLE MACHINERY COSTS	13.27
INTEREST ON OPERATING EXPENSE	0.65
(TOT. VARIABLE COSTS X 11.0 % X 0.2 YRS.)	
TOTAL CASH COSTS	24.19

LABOR

DIRECT LABOR	7.08
(1.2 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	31.28

FIXED COSTS

FIXED MACHINERY COSTS	20.52
TAXES ON LAND (\$ 400 VALUE/ACRE X 1%)	4.00
INTEREST ON LAND (\$ 400 VALUE/ACRE X 6%)	24.00
TOTAL FIXED COSTS	48.52
TOTAL COST, EXCEPT OVERHEAD AND MGT.	79.80

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	1.21
MANAGEMENT CHARGE	6.00
(\$ 2.00 X ESTIMATED YIELD)	
TOTAL OVERHEAD AND MANAGEMENT	7.21
TOTAL COST PER ACRE	87.01
TOTAL COST PER UNIT OF PRODUCTION	29.00
(BASED ON ESTIMATED YIELD)	

DESCRIPTION OF A TYPICAL NORTHERN NEBRASKA RANCH

Cultivated crops are generally not feasible in the Sandhills area without irrigation. Closely sown crops like oats, rye, or barley may be grown on non-irrigated sites as a companion crop to alfalfa establishment or for additional grain or forage.

Irrigation development is largely of the center-pivot or other sprinkler type. The selection of crops to irrigate is limited by size of the irrigable acreage and either the availability of custom hire or the line of machinery presently available on the ranch. For example, if a rancher is new to irrigation, a conservative estimate for an investment in a new tractor, disk, planter, and cultivator or sprayer needed to grow (not harvest) a corn crop is about \$37,370. About 13.8% of this is an annual cost for depreciation, interest, taxes, and insurance or \$5,157. If only one center-pivot site of 130 acres is available, the added machinery investment would add an annual fixed cost of \$39.67/A. If 390 acres can be irrigated, the fixed cost/A for machinery would be about \$13.22/A which would probably make it competitive with custom rates for two discing, planting, and cultivating. As a result, the "typical" practice for irrigated corn production in the Sandhills is to custom hire smaller acreages and own machinery for larger acreages.

390 acres are assumed as "typical" for the irrigated corn budget. The cost of custom production for acreages up to that level should be similar. Machinery ownership costs per acre for larger acreages could be slightly lower.

The "typical" ranch consists of a total of 6,000 acres with 390 irrigated with center-pivots, 320 acres of wet meadow hayland and 400 acres of upland hayland. Acreages of alternative crops that might fit this situation are:

<u>"Typical Ranch</u>		<u>Machinery Inventory</u>	
Irrigated Acreages:		60-69 hp tractor, gas	
Corn, grain	390	120-130 hp tractor, diesel	\$35,490
Corn, silage	60	21' heavy duty disk	8,090
Alfalfa	130	6-row, 30" planter	6,843
Pasture	260	field sprayer	1,505
		combine, 95 hp, gas with 3-row cornhead	34,511
Wet Meadow Acreages:		3/4 ton pickup	8,450
Nature hay	320	single axle truck, 250 bu grain box	18,500
Alfalfa	160	giant round baler	8,458
		14' self-propelled swather with conditioner	18,230
Dryland Hayland:			
Native hay	400		

Note that the sum of the acreages shown above will not be equal to the total acres available for each class of land. There are a vast number of possible acreage combinations of various crops which could be grown on this ranch.

Other jobs that may be necessary for crop production on this "typical" ranch for which machinery is not owned will be done with custom hire.

ESTIMATED 1980 COSTS PER CROP ACRE, NORTHERN NEBRASKA

CORN GRAIN, CENTER PIVOT IRRIGATED, DIESEL, 250 FT. HEAD

CROPLAND ACRES	390.0	EXPECTED YIELD PER ACRE	125.0
ACRES THIS CROP	130.0	ANIMAL UNITS OF GRAZING	2.0

JOB	ACRES/ HOUR	PURCHASED INPUTS		MACHINE COSTS	
		AMOUNT	VALUE	VARIABLE	FIXED TOTAL
BROADCAST SPREADER	9.72			0.88	1.17 2.04
SUL-PH-MAG		100.00	6.00		6.00
P205		40.00	10.00		10.00
DRY NITROGEN		50.00	11.00		11.00
ANHYDROUS APPLICATOR	8.84			1.24	1.80 3.04
NH3		100.00	12.00		12.00
TANDEM DISC	10.63			1.22	1.96 3.18
TANDEM DISC	10.63			1.22	1.96 3.18
PLANTER (FERT., HERB., ETC.)	4.95			2.58	3.63 6.21
SEED		0.33	18.15		18.15
18-46-0		50.00	7.25		7.25
ZINC SULPHATE		4.00	3.60		3.60
BROADCAST. HERB.		1.00	12.00		12.00
COMBINE * CORN HEAD	3.13			7.44	18.78 26.23
IRRIG. 15IN.	2.00			60.00	56.25 116.25
HAUL	2.00			7.00	5.00 12.00
AUGER	2.00			0.32	0.65 0.97

CASH COSTS

PURCHASED INPUTS	80.00
VARIABLE MACHINERY COSTS	81.89
INTEREST ON OPERATING EXPENSE	8.90
(TOT. VARIABLE COSTS X 11.0 % X 0.5 YRS.)	
TOTAL CASH COSTS	170.79

LABOR

DIRECT LABOR	14.56
(2.4 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	185.35

FIXED COSTS

FIXED MACHINERY COSTS	91.21
TAXES ON LAND (\$ 325 VALUE/ACRE X 1%)	3.25
INTEREST ON LAND (\$ 325 VALUE/ACRE X 6%)	19.50
TOTAL FIXED COSTS	113.96
TOTAL COST, EXCEPT OVERHEAD AND MGT.	299.31

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	8.54
MANAGEMENT CHARGE	12.50
(\$ 0.10 X ESTIMATED YIELD)	
TOTAL OVERHEAD AND MANAGEMENT	21.04
TOTAL COST PER ACRE	320.35
TOTAL COST PER UNIT OF PRODUCTION	2.56
(BASED ON ESTIMATED YIELD)	

ESTIMATED 1980 COSTS PER CROP ACRE, NORTHERN NEBRASKA

CORN SILAGE, CENTER PIVOT IRRIGATED, DIESEL, 250 FT. HEAD

CROPLAND ACRES	390.0	EXPECTED YIELD PER ACRE	18.0
ACRES THIS CROP	60.0	ANIMAL UNITS OF GRAZING	0.0

JOB	ACRES/ HOUR	PURCHASED		MACHINE COSTS		
		AMOUNT	VALUE	VARIABLE	FIXED	TOTAL
BROADCAST SPREADER	9.72			0.88	1.17	2.04
SUL-P0-NAG		100.00	6.00			6.00
P205		40.00	10.00			10.00
DRY NITROGEN		50.00	11.00			11.00
ANHYDROUS APPLICATOR	8.84			1.24	1.80	3.04
NH3		100.00	12.00			12.00
TANDEM DISC	10.63			1.22	1.96	3.18
TANDEM DISC	10.63			1.22	1.96	3.18
PLANTER (FERT., HERB., ETC.)	4.95			2.58	3.63	6.21
SEED		0.33	18.15			18.15
18-46-0		50.00	7.25			7.25
ZINC SULFATE		4.00	3.60			3.60
BRDCST. HERB.		1.00	12.00			12.00
FORAGE CHOPPER	(CUSTOM OP.)			45.00		45.00
CHOP AND WAGONS		0.0	0.0			0.0
IRRIG. 15 IN.	2.00			60.00	56.25	116.25
HAUL AND PACK	0.50			10.00	4.00	14.00

CASH COSTS

PURCHASED INPUTS	80.00
VARIABLE MACHINERY COSTS	122.13
INTEREST ON OPERATING EXPENSE	11.12
(TOT. VARIABLE COSTS X 11.0 % X 0.5 YRS.)	
TOTAL CASH COSTS	213.24

LABOR

DIRECT LABOR	18.64
(3.1 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	231.88

FIXED COSTS

FIXED MACHINERY COSTS	70.77
TAXES ON LAND (\$ 325 VALUE/ACRE X 1%)	3.25
INTEREST ON LAND (\$ 325 VALUE/ACRE X 6%)	19.50
TOTAL FIXED COSTS	93.52
TOTAL COST, EXCEPT OVERHEAD AND MGT.	325.40

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	10.66
MANAGEMENT CHARGE	12.60
(\$ 0.70 X ESTIMATED YIELD)	
TOTAL OVERHEAD AND MANAGEMENT	23.26
TOTAL COST PER ACRE	348.67
TOTAL COST PER UNIT OF PRODUCTION	19.37
(BASED ON ESTIMATED YIELD)	

ESTIMATED 1980 COSTS PER CROP ACRE, NORTHERN NEBRASKA

ESTABLISH ALFALFA, CP IRRIGATION DIESEL, 250 FT. HEAD

CROPLAND ACRES	390.0	EXPECTED YIELD PER ACRE	1.0
ACRES THIS CROP	130.0	ANIMAL UNITS OF GRAZING	0.0

JOB	ACRES/ HOUR	PURCHASED INPUTS		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
BROADCAST SPREADER	16.20			0.40	0.38	0.78
SPREADER RENT		1.00	2.00			2.00
P205		75.00	18.75			18.75
AMMON. SUL.		80.00	5.60			5.60
TANDEM DISC	10.63			1.22	1.96	3.18
GRAIN DRILL	4.22			1.52	1.47	2.99
DRILL RENT		1.00	4.50			4.50
SEED		12.00	27.00			27.00
4IN. IRRIG.	6.00			16.00	0.0	16.00

CASH COSTS

PURCHASED INPUTS	57.85
VARIABLE MACHINERY COSTS	19.13
INTEREST ON OPERATING EXPENSE	2.12
(TOT. VARIABLE COSTS X 11.0 % X 0.2 YRS.)	
TOTAL CASH COSTS	79.10

LABOR

DIRECT LABOR	3.36
(0.6 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	82.46

FIXED COSTS

FIXED MACHINERY COSTS	3.81
TAXES ON LAND (\$ 0 VALUE/ACRE X 1%)	0.0
INTEREST ON LAND (\$ 0 VALUE/ACRE X 6%)	0.0
TOTAL FIXED COSTS	3.81
TOTAL COST, EXCEPT OVERHEAD AND MGT.	86.27

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	3.96
MANAGEMENT CHARGE	0.0
(\$ 0.0 X ESTIMATED YIELD)	
TOTAL OVERHEAD AND MANAGEMENT	3.96
TOTAL COST PER ACRE	90.22
TOTAL COST PER UNIT OF PRODUCTION	90.22
(BASED ON ESTIMATED YIELD)	

ESTIMATED 1980 COSTS PER CROP ACRE: NORTHERN NEBRASKA

ALFALFA HAY, CENTER PIVOT IRRIGATED, DIESEL, 250FT. HEAD

CROPLAND ACRES	390.0	EXPECTED YIELD PER ACRE	5.0
ACRES THIS CROP	130.0	ANIMAL UNITS OF GRAZING	0.0

JOB	ACRES/ HOUR	PURCHASED		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
SELF-PROPELLED WINDROWER	5.92			1.45	2.23	3.68
BALER, GIANT	15.80			0.63	1.43	2.06
TWINE		2.00	0.30			0.30
SELF-PROPELLED WINDROWER	5.92			1.80	2.23	4.03
BALER, GIANT	15.80			0.63	1.43	2.06
TWINE		2.00	0.30			0.30
SELF-PROPELLED WINDROWER	5.92			1.80	2.23	4.03
BALER, GIANT	15.80			0.63	1.43	2.06
TWINE		2.00	0.30			0.30
18 IN. IRRIG..	2.00			72.00	56.25	128.25
MOVE BALES	1.20			6.00	1.75	7.75

CASH COSTS

PURCHASED INPUTS	0.90
VARIABLE MACHINERY COSTS	84.95
INTEREST ON OPERATING EXPENSE	4.72
(TOT. VARIABLE COSTS X 11.0 % X 0.5 YRS.)	
TOTAL CASH COSTS	90.57

LABOR

DIRECT LABOR	12.18
(2.0 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	102.75

SHARE OF SEEDING COSTS

15.34

FIXED COSTS

FIXED MACHINERY COSTS	68.98
TAXES ON LAND (\$ 325 VALUE/ACRE X 1%)	3.25
INTEREST ON LAND (\$ 325 VALUE/ACRE X 6%)	19.50
TOTAL FIXED COSTS	107.07
TOTAL COST, EXCEPT OVERHEAD AND MGT.	209.82

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	4.53
MANAGEMENT CHARGE	11.25
(\$ 2.25 X ESTIMATED YIELD)	
TOTAL OVERHEAD AND MANAGEMENT	15.78
TOTAL COST PER ACRE	225.59
TOTAL COST PER UNIT OF PRODUCTION	45.12
(BASED ON ESTIMATED YIELD)	

ESTIMATED 1980 COSTS PER CROP ACRE, NORTHERN NEBRASKA

ESTABLISH IRRIG. GRASS IN FALL, CP DIESEL IRRIG. 250 FT. HD.

CROPLAND ACRES	390.0	EXPECTED YIELD PER ACRE	1.0
ACRES THIS CROP	130.0	ANIMAL UNITS OF GRAZING	0.0

JOB	ACRES/ HOUR	PURCHASED INPUTS		MACHINE COSTS		
		AMOUNT	VALUE	VARIABLE	FIXED	TOTAL
BROADCAST SPREADER	16.20			0.40	0.38	0.78
SPREADER RENT		1.00	2.00			2.00
P205		50.00	12.50			12.50
TANDEM DISC	10.63			1.30	2.24	3.55
SPIKE TOOTH HARROW	12.45			0.52	0.93	1.45
GRAIN DRILL	4.22			1.52	1.47	2.99
DRILL RENT		1.00	4.50			4.50
SEED MIX		18.00	36.00			36.00
18-46-0		50.00	7.25			7.25
4 IN. IRRIG.	6.00			16.00	0.0	16.00

CASH COSTS

PURCHASED INPUTS	62.25
VARIABLE MACHINERY COSTS	19.74
INTEREST ON OPERATING EXPENSE	2.25
(TOT. VARIABLE COSTS X 11.0 % X 0.2 YRS.)	
TOTAL CASH COSTS	84.24

LABOR

DIRECT LABOR	3.84
(0.6 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	88.08

FIXED COSTS

FIXED MACHINERY COSTS	5.02
TAXES ON LAND (\$ 0 VALUE/ACRE X 1%)	0.0
INTEREST ON LAND (\$ 0 VALUE/ACRE X 6%)	0.0
TOTAL FIXED COSTS	5.02
TOTAL COST, EXCEPT OVERHEAD AND MGT.	93.11

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	4.21
MANAGEMENT CHARGE (\$ 0.0 X ESTIMATED YIELD)	0.0
TOTAL OVERHEAD AND MANAGEMENT	4.21
TOTAL COST PER ACRE	97.32
TOTAL COST PER UNIT OF PRODUCTION (BASED ON ESTIMATED YIELD)	97.32

ESTIMATED 1980 COSTS PER CROP ACRE, NORTHERN NEBRASKA

IRRIGATED PASTURE, CENTER PIVOT IRRIGATION, DIESEL, 250 FT.

CROPLAND ACRES	390.0	EXPECTED YIELD PER ACRE	0.0
ACRES THIS CROP	130.0	ANIMAL UNITS OF GRAZING	10.0

JOB	ACRES/ HOUR	PURCHASED		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
18 IN. IRRIG.	2.00		72.00	56.25		128.25
175 LBS. LIQ. N	60.00	38.50		0.0		38.50
FENCING	12.00		0.30	0.80		1.10
MOVE CATTLE	6.00		0.10	0.10		0.20

CASH COSTS

PURCHASED INPUTS	38.50
VARIABLE MACHINERY COSTS	72.40
INTEREST ON OPERATING EXPENSE	12.20
(TOT. VARIABLE COSTS X 11.0 % X 1.0 YRS.)	
TOTAL CASH COSTS	123.10

LABOR

DIRECT LABOR	4.60
(0.8 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	127.70

SHARE OF SEEDING COSTS

13.62

FIXED COSTS

FIXED MACHINERY COSTS	57.15
TAXES ON LAND (\$ 325 VALUE/ACRE X 1%)	3.25
INTEREST ON LAND (\$ 325 VALUE/ACRE X 6%)	19.50
TOTAL FIXED COSTS	93.52
TOTAL COST, EXCEPT OVERHEAD AND MGT.	221.22

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	6.15
MANAGEMENT CHARGE (\$ 1.25 X ESTIMATED YIELD)	12.50
TOTAL OVERHEAD AND MANAGEMENT	18.65
TOTAL COST PER ACRE	239.87
TOTAL COST PER UNIT OF PRODUCTION (BASED ON ESTIMATED YIELD)	23.99

ESTIMATED 1980 COSTS PER CROP ACRE, NORTHERN NEBRASKA

NATIVE WET MEADOW HAY, LARGE ROUND BALES

CROPLAND ACRES	390.0	EXPECTED YIELD PER ACRE	1.0
ACRES THIS CROP	320.0	ANIMAL UNITS OF GRAZING	1.0

JOB	ACRES/ HOUR	PURCHASED INPUTS		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
SELF-PROPELLED WINDROWER	5.92			1.45	2.24	3.69
BALER, GIANT	15.80			0.63	1.43	2.06
TWINE		2.00	0.30			0.30
HAUL BALES	6.00			1.20	0.75	1.95

CASH COSTS

PURCHASED INPUTS	0.30
VARIABLE MACHINERY COSTS	3.28
INTEREST ON OPERATING EXPENSE	0.20
(TOT. VARIABLE COSTS X 11.0 % X 0.5 YRS.)	
TOTAL CASH COSTS	3.78

LABOR

DIRECT LABOR	2.39
(0.4 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	6.17

FIXED COSTS

FIXED MACHINERY COSTS	4.42
TAXES ON LAND (\$ 200 VALUE/ACRE X 1%)	2.00
INTEREST ON LAND (\$ 200 VALUE/ACRE X 6%)	12.00
TOTAL FIXED COSTS	18.42
TOTAL COST, EXCEPT OVERHEAD AND MGT.	24.59

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	0.19
MANAGEMENT CHARGE	2.00
(\$ 2.00 X ESTIMATED YIELD)	
TOTAL OVERHEAD AND MANAGEMENT	2.19
TOTAL COST PER ACRE	26.78
TOTAL COST PER UNIT OF PRODUCTION	26.78
(BASED ON ESTIMATED YIELD)	

ESTIMATED 1980 COSTS PER ACRE, NORTHERN NEBRASKA

NATIVE UPLAND HAY, IN SWATH

CROPLAND ACRES	390.0	EXPECTED YIELD PER ACRE	0.6
ACRES THIS CROP	400.0	ANIMAL UNITS OF GRAZING	0.0

JOB	ACRES/ HOUR	PURCHASED		MACHINE COSTS		
		AMOUNT	VALUE	VARIABLE	FIXED	TOTAL
MOWER	3.84			1.51	1.03	2.54
SIDE DELIVERY RAKE	8.98			0.77	0.86	1.64
<hr/>						
CASH COSTS						
				0.0		
				2.28		
				0.06		
				(TOT. VARIABLE COSTS X 11.0 % X 0.2 YRS.)		
						2.35
LABOR						
				1.34		
				(0.4 HRS X \$ 3.00/HR X 1.2 (OVERHEAD))		
						3.68
FIXED COSTS						
				1.89		
				1.10		
				6.60		
						9.59
						13.28
OVERHEAD AND MANAGEMENT						
				0.12		
				1.20		
				(\$ 2.00 X ESTIMATED YIELD)		
						1.32
						14.59
						24.32
						(BASED ON ESTIMATED YIELD)

DESCRIPTION OF CENTRAL NEBRASKA BENCHMARK FARM

Crop budgets have been prepared which are typical and common to irrigated and dryland farms of central Nebraska. All of these crops are not usually raised on any one farm in the area. For example, it is unlikely that both irrigated and dryland corn silage will be produced on a given farm the same year, and so it is with the benchmark farm. Consequently, the total of the acreage of individual crops shown here exceeds the crop average of the farm described below. The different crop budgets do provide information to whomever may wish to refer to them.

Custom work for neighbors is included in the farm plan. This will represent about 25% of the benchmark farm tillable acreage. On the other hand, smaller acreages of crops that do not justify machinery ownership will be partially custom operated by others.

Labor will be supplied mostly by the operator and his family. Seasonal labor such as for harvesting and hauling and stacking hay bales will be employed.

Harvesting will be started early enough that some grain drying will be necessary.

It is assumed that some livestock production will be included on the farm.

Benchmark Farm		Machinery Inventory	Cost
Total Acres	760	130 hp diesel tractor	\$35,444
Irr. Cropland, gravity	220	80 hp diesel tractor	27,060
Irr. Cropland, pivot	133	Old usable tractor (no market value)	
Non-Irr. Cropland	280	Truck, 350 bu. grain box	17,963
Pasture	80	Pickup, 3/4 ton	8,400
Roads, farmstead, etc.	47	Tandem disc, 21'	8,060
		Corn machinery, 30" spacing	
		Shredder, 6-row	4,520
		Anhydrous applicator, 9 shank	3,226
		Planter, 6-row	6,815
		Cultivator-hiller, 6-row	3,218
		Combine, 6-row cornhead)	
		20' grain platform)	66,000
		Wagon, 350 bu.	1,648
		Auger, 60'8" pto	2,741
		Dryer, cont. flow, 350 bu/hr	18,000
		remove 8 points moisture	
		Wet corn handling bin, 3700 bu.	5,195
		Chisel sweeps, 18'	4,038
		Field conditioner, 30'	3,681
		Spike tooth harrow	1,080
		Grain drill, 16'10"	4,500
		Bale loader	400
		Irrigation equipment	
		Pivot sprinkler, diesel	
		Gravity wells, 2 diesel	
		reuse pits, pumps, and return pipe	
		Gated, conveyor, reuse pipe and pipe wagon	
		Layout beginning of season and pick up	
		at end of season	

ESTIMATED 1980 COSTS PER ACRE, CENTRAL NEBRASKA

CORN FOR GRAIN, CENTER PIVOT IRRIGATED, DIESEL, 325 FT HEAD

CROPLAND ACRES	632.0	EXPECTED YIELD PER ACRE	135.0
ACRES THIS CROP	132.0	ANIMAL UNITS OF GRAZING	2.0

JOB	ACRES/ HOUR	PURCHASED		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
STALK SHREDDER	7.73			1.71	2.79	4.50
TANDEM DISC	10.63			1.12	1.58	2.69
TANDEM DISC	10.63			1.12	1.58	2.69
ANHYDROUS APPLICATOR	6.87			1.52	1.83	3.35
ANHY NITROGEN		155.00	18.60			18.60
PLANTER (FERT., HERB., ETC)	4.95			1.91	2.55	4.46
SEED		0.33	18.15			18.15
STARTER		0.05	14.50			14.50
HERBICIDE		1.00	6.00			6.00
INSECTICIDE		1.00	8.00			8.00
ROW CROP CULTIVATOR	5.35			1.29	1.38	2.66
ROW CROP CULTIVATOR	5.35			1.29	1.38	2.66
COMBINE, CORN HEAD	3.50			4.47	10.32	14.78
IRRIGATE 16 IN	2.00			79.00	60.13	139.13
HAUL & BIN	3.53			1.76	3.70	5.46
AUGER	0.0			0.20	0.53	0.73
DRYER	7.50			9.29	6.77	16.06

CASH COSTS

PURCHASED INPUTS	65.25
VARIABLE MACHINERY COSTS	104.66
INTEREST ON OPERATING EXPENSE	12.52
(TOT. VARIABLE COSTS X 11.0 % X 0.7 YRS.)	
TOTAL CASH COSTS	182.44

LABOR

DIRECT LABOR	13.45
(2.2 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	195.88

FIXED COSTS

FIXED MACHINERY COSTS	94.52
TAXES ON LAND (\$ 750 VALUE/ACRE X 1%)	7.50
INTEREST ON LAND (\$ 750 VALUE/ACRE X 6%)	45.00
TOTAL FIXED COSTS	147.02
TOTAL COST, EXCEPT OVERHEAD AND MGT.	342.91

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	9.12
MANAGEMENT CHARGE	13.50
(\$ 0.10 X ESTIMATED YIELD)	
TOTAL OVERHEAD AND MANAGEMENT	22.62
TOTAL COST PER ACRE	365.53
TOTAL COST PER UNIT OF PRODUCTION	2.71
(BASED ON ESTIMATED YIELD)	

ESTIMATED 1980 COSTS PER ACRE, CENTRAL NEBRASKA

CORN FOR SILAGE, CENTER PIVOT IRRIGATED, DIESEL, 325 FT HEAD

CROPLAND ACRES 632.0
ACRES THIS CROP 20.0

EXPECTED YIELD PER ACRE 20.0
ANIMAL UNITS OF GRAZING 0.0

JOB	ACRES/ HOUR	PURCHASED		MACHINE COSTS	
		AMOUNT	VALUE	VARIABLE	FIXED TOTAL
STALK SHREDDER	7.73			1.79	3.08 4.87
TANDEM DISC	10.63			1.12	1.58 2.69
TANDEM DISC	10.63			1.12	1.58 2.69
ANHYDROUS APPLICATOR	6.87			1.52	1.83 3.35
ANHY NITROGEN		155.00	18.60		
PLANTER (FERT., HERB., ETC)	4.95			1.91	2.55 4.46
SEED		0.33	18.15		
18 46 0		100.00	15.00		
HERBICIDE		1.00	6.00		
INSECTICIDE		1.00	8.00		
ROW CROP CULTIVATOR	5.35			1.29	1.38 2.66
ROW CROP CULTIVATOR	5.35			1.29	1.38 2.66
FORAGE CHOPPER	(CUSTOM OP.)			32.00	
TRUCK	(CUSTOM OP.)			12.15	
IRRIGATE 16 IN	2.00			79.00	60.13 139.13
HAUL SILAGE	0.75			4.62	5.56 10.18
PACK SILAGE	1.50			3.64	6.28 9.92

CASH COSTS

PURCHASED INPUTS	65.75
VARIABLE MACHINERY COSTS	141.44
INTEREST ON OPERATING EXPENSE	15.27
(TOT. VARIABLE COSTS X 11.0 % X 0.7 YRS.)	
TOTAL CASH COSTS	222.46

LABOR

DIRECT LABOR	21.23
(3.5 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	243.69

FIXED COSTS

FIXED MACHINERY COSTS	85.33
TAXES ON LAND (\$ 750 VALUE/ACRE X 1%)	7.50
INTEREST ON LAND (\$ 750 VALUE/ACRE X 6%)	45.00
TOTAL FIXED COSTS	137.83
TOTAL COST, EXCEPT OVERHEAD AND MGT.	381.52

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	11.12
MANAGEMENT CHARGE	12.00
(\$ 0.60 X ESTIMATED YIELD)	
TOTAL OVERHEAD AND MANAGEMENT	23.12
TOTAL COST PER ACRE	404.65
TOTAL COST PER UNIT OF PRODUCTION	20.23
(BASED ON ESTIMATED YIELD)	

ESTIMATED 1980 COSTS PER ACRE, CENTRAL NEBRASKA

GRAIN SORGHUM FOR GRAIN, PIVOT IRRIGATED, DIESEL, 325 FT HEAD

CROPLAND ACRES 632.0
ACRES THIS CROP 40.0

EXPECTED YIELD PER ACRE 95.0
ANIMAL UNITS OF GRAZING 2.0

JOB	ACRES/ HOUR	PURCHASED INPUTS		MACHINE COSTS	
		AMOUNT	VALUE	VARIABLE	FIXED TOTAL
TANDEM DISC	10.63			1.12	1.58 2.69
TANDEM DISC	10.63			1.12	1.58 2.69
ANHYDROUS APPLICATOR	6.87			1.52	1.83 3.35
ANHY NITROGEN		100.00	12.00		12.00
PLANTER (FERT., HERB., ETC)	4.95			1.91	2.55 4.46
SEED		0.00	4.00		4.00
18 46 0		100.00	15.00		15.00
HERBICIDE		1.00	6.00		6.00
ROW CROP CULTIVATOR	5.35			1.29	1.38 2.66
ROW CROP CULTIVATOR	5.35			1.29	1.38 2.66
COMBINE, GRAIN HEAD	4.50			2.84	6.44 9.28
IRRIGATE 8 IN	4.00			39.62	60.13 99.75
HAUL & BIN	4.62			1.50	3.34 4.84
AUGER	0.0			0.17	0.53 0.70
DRYER	12.00			6.12	4.58 10.70

CASH COSTS

PURCHASED INPUTS	37.00
VARIABLE MACHINERY COSTS	58.48
INTEREST ON OPERATING EXPENSE	7.04
(TOT. VARIABLE COSTS X 11.0 % X 0.7 YRS.)	
TOTAL CASH COSTS	102.52

LABOR

DIRECT LABOR	10.09
(1.7 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	112.61

FIXED COSTS

FIXED MACHINERY COSTS	85.31
TAXES ON LAND (\$ 750 VALUE/ACRE X 1%)	7.30
INTEREST ON LAND (\$ 750 VALUE/ACRE X 6%)	45.00
TOTAL FIXED COSTS	137.61
TOTAL COST, EXCEPT OVERHEAD AND MGT.	250.42

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	5.13
MANAGEMENT CHARGE	9.50
(\$ 0.10 X ESTIMATED YIELD)	
TOTAL OVERHEAD AND MANAGEMENT	14.63
TOTAL COST PER ACRE	265.04
TOTAL COST PER UNIT OF PRODUCTION	2.79
(BASED ON ESTIMATED YIELD)	

ESTIMATED 1989 COSTS PER ACRE, CENTRAL NEBRASKA

CORN FOR GRAIN, GRAVITY IRRIGATED, DIESEL, 150 FT HEAD

CROPLAND ACRES 632.0
ACRES THIS CROP 132.0EXPECTED YIELD PER ACRE 135.0
ANIMAL UNITS OF GRAZING 2.0

JOB	ACRES/ HOUR	PURCHASED INPUTS		MACHINE COSTS	
		AMOUNT	VALUE	VARIABLE	FIXED TOTAL
STALK SHREDDER	7.73			1.71	2.79 4.50
TANDEM DISC	10.63			1.12	1.58 2.69
TANDEM DISC	10.63			1.12	1.58 2.69
ANHYDROUS APPLICATOR	6.87			1.52	1.83 3.35
ANHY NITROGEN		155.00	18.60		18.60
PLANTER (FERT., HERB., ETC)	4.95			1.91	2.55 4.46
SEED		0.33	18.15		18.15
STARTER		0.05	14.50		14.50
HERBICIDE		1.00	6.00		6.00
INSECTICIDE		1.00	8.00		8.00
ROW CROP CULTIVATOR	5.35			1.29	1.38 2.66
ROW CROP CULTIVATOR	5.35			1.29	1.38 2.66
COMBINE, CORN HEAD	3.50			4.47	10.32 14.78
IRRIGATE 16 IN	1.00			36.35	60.83 97.18
L & P IRR PIPE	20.00			0.28	0.28 0.56
HAUL & DIN	3.53			1.76	3.70 5.46
AUGER	0.0			0.20	0.53 0.73
DRYER	7.50			9.29	6.77 16.06

CASH COSTS

PURCHASED INPUTS	65.25
VARIABLE MACHINERY COSTS	62.29
INTEREST ON OPERATING EXPENSE	9.40
(TOT. VARIABLE COSTS X 11.0 % X 0.7 YRS.)	
TOTAL CASH COSTS	136.94

LABOR

DIRECT LABOR	16.75
(2.8 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	153.69

FIXED COSTS

FIXED MACHINERY COSTS	95.50
TAXES ON LAND (\$1300 VALUE/ACRE X 1%)	13.00
INTEREST ON LAND (\$1300 VALUE/ACRE X 6%)	78.00
TOTAL FIXED COSTS	186.50
TOTAL COST, EXCEPT OVERHEAD AND MGT.	340.19

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	6.85
MANAGEMENT CHARGE	13.50
(\$ 0.10 X ESTIMATED YIELD)	
TOTAL OVERHEAD AND MANAGEMENT	20.35
TOTAL COST PER ACRE	360.54
TOTAL COST PER UNIT OF PRODUCTION	2.67
(BASED ON ESTIMATED YIELD)	

ESTIMATED 1980 COSTS PER ACRE, CENTRAL NEBRASKA

CORN FOR SILAGE, GRAVITY IRRIGATED, DIESEL, 150 FT HEAD

CROPLAND ACRES	632.0	EXPECTED YIELD PER ACRE	20.0
ACRES THIS CROP	20.0	ANIMAL UNITS OF GRAZING	0.0

JOB	ACRES/ HOUR	PURCHASED		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
STALK SHREDDER	7.73			1.79	3.08	4.87
TANDEM DISC	10.63			1.12	1.58	2.69
TANDEM DISC	10.63			1.12	1.58	2.69
ANHYDROUS APPLICATOR	6.87			1.52	1.83	3.35
ANHY NITROGEN		155.00	18.60			19.60
PLANTER (FERT., HERB., ETC)	4.95			1.91	2.55	4.46
SEED		0.33	18.15			18.15
STARTER		0.05	14.50			14.50
HERBICIDE		1.00	6.00			6.00
INSECTICIDE		1.00	8.00			8.00
ROW CROP CULTIVATOR	5.35			1.29	1.38	2.66
ROW CROP CULTIVATOR	5.35			1.29	1.38	2.66
FORAGE CHOPPER	(CUSTOM OP.)			32.00		32.00
TRUCK	(CUSTOM OP.)			12.15		12.15
IRRIGATE 16 IN	1.00			36.35	60.83	97.18
L & P IRR PIPE	20.00			0.28	0.28	0.56
HAUL SILAGE	0.75			4.62	5.56	10.18
PACK SILAGE	1.50			3.64	6.28	9.92

CASH COSTS

PURCHASED INPUTS	65.25
VARIABLE MACHINERY COSTS	99.07
INTEREST ON OPERATING EXPENSE	12.11
(TOT. VARIABLE COSTS X 11.0 % X 0.7 YRS.)	
TOTAL CASH COSTS	176.43

LABOR

DIRECT LABOR	24.53
(4.1 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	200.96

FIXED COSTS

FIXED MACHINERY COSTS	86.31
TAXES ON LAND (\$1300 VALUE/ACRE X 1%)	13.00
INTEREST ON LAND (\$1300 VALUE/ACRE X 6%)	78.00
TOTAL FIXED COSTS	177.31
TOTAL COST, EXCEPT OVERHEAD AND MGT.	378.27

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	8.82
MANAGEMENT CHARGE (\$ 0.60 X ESTIMATED YIELD)	12.00
TOTAL OVERHEAD AND MANAGEMENT	20.82
TOTAL COST PER ACRE	399.10
TOTAL COST PER UNIT OF PRODUCTION (BASED ON ESTIMATED YIELD)	19.95

ESTIMATED 1980 COSTS PER ACRE, CENTRAL NEBRASKA

SOYBEANS, GRAVITY IRRIGATED, DIESEL, 150 FT HEAD

CROPLAND ACRES 632.0
ACRES THIS CROP 40.0EXPECTED YIELD PER ACRE 40.0
ANIMAL UNITS OF GRAZING 0.0

JOB	ACRES/ HOUR	PURCHASED		MACHINE COSTS	
		AMOUNT	VALUE	VARIABLE	FIXED TOTAL
TANDEM DISC	10.63			1.12	1.58 2.69
TANDEM DISC	10.63			1.12	1.58 2.69
PLANTER (FERT., HERB., ETO)	4.95			1.91	2.55 4.46
SEED		1.00	9.00		9.00
INOCULANT		1.00	0.50		0.50
HERBICIDE		1.00	7.50		7.50
HAND WEED		0.50	1.50		1.50
ROW CROP CULTIVATOR	5.35			1.29	1.38 2.66
ROW CROP CULTIVATOR	5.35			1.29	1.38 2.66
COMBINE, GRAIN HEAD	3.50			3.38	7.11 10.49
IRRIGATE 8 IN	2.00			13.69	60.83 74.52
L & P IRRI PIPE	20.00			0.28	0.28 0.56
HAUL & BIN	3.53			0.74	1.83 2.57
AUGER	0.0			0.17	0.53 0.70

CASH COSTS

PURCHASED INPUTS	18.50
VARIABLE MACHINERY COSTS	24.98
INTEREST ON OPERATING EXPENSE	3.20
(TOT. VARIABLE COSTS X 11.0 % X 0.7 YRS.)	
TOTAL CASH COSTS	46.68

LABOR

DIRECT LABOR	11.30
(1.9 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	57.98

FIXED COSTS

FIXED MACHINERY COSTS	79.03
TAXES ON LAND (\$1300 VALUE/ACRE X 1%)	13.00
INTEREST ON LAND (\$1300 VALUE/ACRE X 6%)	78.00
TOTAL FIXED COSTS	170.03
TOTAL COST, EXCEPT OVERHEAD AND MGT.	228.01

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	2.33
MANAGEMENT CHARGE	12.00
(\$ 0.30 X ESTIMATED YIELD)	
TOTAL OVERHEAD AND MANAGEMENT	14.33
TOTAL COST PER ACRE	242.35
TOTAL COST PER UNIT OF PRODUCTION	6.06
(BASED ON ESTIMATED YIELD)	

ESTIMATED 1980 COSTS PER ACRE, CENTRAL NEBRASKA

ESTABLISH ALFALFA, IRRIGATED, DIESEL, 150 FT HEAD

CROPLAND ACRES	632.0	EXPECTED YIELD PER ACRE	0.0
ACRES THIS CROP	20.0	ANIMAL UNITS OF GRAZING	0.0

JOB	ACRES/ HOUR	PURCHASED INPUTS		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
TANDEM DISC	10.63			1.12	1.58	2.69
TANDEM DISC	10.63			1.12	1.58	2.69
BROADCAST SPREADER	6.50			0.88	0.87	1.74
SPREADER RENTAL		1.00	1.50			1.50
STARTER P205		40.00	10.00			10.00
SPIKE TOOTH HARROW	10.38			0.56	1.50	2.05
SPIKE TOOTH HARROW	10.38			0.56	1.50	2.05
GRAIN DRILL	4.50			1.27	1.25	2.52
DRILL RENTAL		1.00	2.00			2.00
SEED		11.00	24.75			24.75
IRRIGATE 6 IN	2.00			13.69	0.0	13.69
L & P IRR PIPE	20.00			0.28	0.28	0.56

CASH COSTS

PURCHASED INPUTS	38.25
VARIABLE MACHINERY COSTS	19.46
INTEREST ON OPERATING EXPENSE	4.25
(TOT. VARIABLE COSTS X 11.0 % X 0.7 YRS.)	
TOTAL CASH COSTS	61.96

LABOR

DIRECT LABOR	7.84
(1.3 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	69.80

FIXED COSTS

FIXED MACHINERY COSTS	8.54
TAXES ON LAND (\$ 0 VALUE/ACRE X 1%)	0.0
INTEREST ON LAND (\$ 0 VALUE/ACRE X 6%)	0.0
TOTAL FIXED COSTS	8.54
TOTAL COST, EXCEPT OVERHEAD AND MGT.	78.34

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	3.10
MANAGEMENT CHARGE	0.0
(\$ 0.0 X ESTIMATED YIELD)	
TOTAL OVERHEAD AND MANAGEMENT	3.10
TOTAL COST PER ACRE	81.44

ESTIMATED 1980 COSTS PER ACRE, CENTRAL NEBRASKA

ALFALFA FOR HAY, GRAVITY IRRIGATED, DIESEL, 150 FT HEAD

CROPLAND ACRES	632.0	EXPECTED YIELD PER ACRE	6.5
ACRES THIS CROP	20.0	ANIMAL UNITS OF GRAZING	0.0

JOB	ACRES/ HOUR	PURCHASED INPUTS		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
SPIKE TOOTH HARROW	10.38			0.56	1.50	2.05
BROADCAST SPREADER	6.50			0.88	0.87	1.74
SPREADER RENTAL		1.00	1.50			1.50
STARTER P205		10.00	10.00			10.00
WINDROWER	(CUSTOM OP.)			6.25		6.25
WINDROWER	(CUSTOM OP.)			6.25		6.25
WINDROWER	(CUSTOM OP.)			6.26		6.26
WINDROWER	(CUSTOM OP.)			6.25		6.25
BALER, REGULAR	(CUSTOM OP.)			13.50		13.50
BALER, REGULAR	(CUSTOM OP.)			13.50		13.50
BALER, REGULAR	(CUSTOM OP.)			13.50		13.50
BALER, REGULAR	(CUSTOM OP.)			13.50		13.50
IRRIGATE 20 IN	0.80			45.70	60.38	106.08
L & P IRR PIPE	20.00			0.28	0.28	0.56
BALE HAULING	1.15			4.48	11.32	15.80

CASH COSTS

PURCHASED INPUTS	11.50
VARIABLE MACHINERY COSTS	130.90
INTEREST ON OPERATING EXPENSE (TOT. VARIABLE COSTS X 11.0 % X 0.7 YRS.)	10.50
TOTAL CASH COSTS	152.90

LABOR

DIRECT LABOR	14.50
(2.4 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	167.40

SHARE OF SEEDING COSTS

16.29

FIXED COSTS

FIXED MACHINERY COSTS	74.34
TAXES ON LAND (\$1300 VALUE/ACRE X 1%)	13.00
INTEREST ON LAND (\$1300 VALUE/ACRE X 6%)	78.00
TOTAL FIXED COSTS	181.63
TOTAL COST, EXCEPT OVERHEAD AND MGT.	349.03

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	7.64
MANAGEMENT CHARGE (\$ 2.00 X ESTIMATED YIELD)	13.00
TOTAL OVERHEAD AND MANAGEMENT	20.64
TOTAL COST PER ACRE	369.68
TOTAL COST PER UNIT OF PRODUCTION (BASED ON ESTIMATED YIELD)	56.87

ESTIMATED 1980 COSTS PER ACRE, CENTRAL NEBRASKA

CORN FOR GRAIN, DRYLAND

CROPLAND ACRES 632.0
ACRES THIS CROP 80.0

EXPECTED YIELD PER ACRE 48.0
ANIMAL UNITS OF GRAZING 1.0

JOB	ACRES/ HOUR	PURCHASED INPUTS		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
TANDEM DISC	10.63			1.12	1.58	2.69
TANDEM DISC	10.63			1.12	1.58	2.69
ANHYDROUS APPLICATOR	6.87			1.52	1.83	3.35
ANHY NITROGEN		60.00	7.20			7.20
PLANTER (FERT., HERB., ETC)	4.95			1.84	2.36	4.20
SEED		0.17	9.35			9.35
HERBICIDE		1.00	6.00			6.00
ROW CROP CULTIVATOR	5.35			1.22	1.19	2.42
ROW CROP CULTIVATOR	5.35			1.22	1.19	2.42
COMBINE, CORN HEAD	4.50			3.87	9.41	13.28
HAUL & BIN	4.62			0.77	1.93	2.60
AUGER	0.0			0.18	0.53	0.71
DRYER	30.00			3.45	2.47	5.92

CASH COSTS

PURCHASED INPUTS	22.55
VARIABLE MACHINERY COSTS	16.30
INTEREST ON OPERATING EXPENSE	2.86
(TOT. VARIABLE COSTS X 11.0 % X 0.7 YRS.)	
TOTAL CASH COSTS	41.71

LABOR

DIRECT LABOR	8.29
(1.4 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	50.00

FIXED COSTS

FIXED MACHINERY COSTS	23.97
TAXES ON LAND (\$ 750 VALUE/ACRE X 1%)	7.50
INTEREST ON LAND (\$ 750 VALUE/ACRE X 6%)	45.00
TOTAL FIXED COSTS	76.47
TOTAL COST, EXCEPT OVERHEAD AND MGT.	126.47

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	2.09
MANAGEMENT CHARGE	4.80
(\$ 0.10 X ESTIMATED YIELD)	
TOTAL OVERHEAD AND MANAGEMENT	6.89
TOTAL COST PER ACRE	133.36
TOTAL COST PER UNIT OF PRODUCTION	2.78
(BASED ON ESTIMATED YIELD)	

ESTIMATED 1980 COSTS PER ACRE, CENTRAL NEBRASKA

CORN FOR SILAGE, DRYLAND

CROPLAND ACRES	632.0	EXPECTED YIELD PER ACRE	8.0
ACRES THIS CROP	48.0	ANIMAL UNITS OF GRAZING	0.0

JOB	ACRES/ HOUR	PURCHASED INPUTS		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
TANDEM DISC	10.63			1.12	1.58	2.69
TANDEM DISC	6.07			1.78	2.20	3.98
ANHYDROUS APPLICATOR	6.87			1.52	1.83	3.35
ANHY NITROGEN		60.00	7.20			7.20
PLANTER (FERT., HERB., ETC)	4.95			1.91	2.55	4.46
SEED		0.33	18.15			18.15
HERBICIDE		1.00	6.00			6.00
ROW CROP CULTIVATOR	5.35			1.33	1.43	2.76
ROW CROP CULTIVATOR	5.35			1.33	1.43	2.76
FORAGE CHOPPER	(CUSTOM OP.)			17.94		17.94
HAUL SILAGE	1.36			2.86	3.90	6.76
PACK SILAGE	2.73			1.88	3.26	5.14

CASH COSTS

PURCHASED INPUTS	31.35
VARIABLE MACHINERY COSTS	31.66
INTEREST ON OPERATING EXPENSE	4.64
(TOT. VARIABLE COSTS X 11.0 % X 0.7 YRS.)	
TOTAL CASH COSTS	67.65

LABOR

DIRECT LABOR	12.48
(2.1 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	80.13

FIXED COSTS

FIXED MACHINERY COSTS	18.18
TAXES ON LAND (\$ 750 VALUE/ACRE X 1%)	7.50
INTEREST ON LAND (\$ 750 VALUE/ACRE X 6%)	45.00
TOTAL FIXED COSTS	70.68
TOTAL COST, EXCEPT OVERHEAD AND MGT.	150.81

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	3.38
MANAGEMENT CHARGE	4.80
(\$ 0.60 X ESTIMATED YIELD)	
TOTAL OVERHEAD AND MANAGEMENT	8.18
TOTAL COST PER ACRE	159.00
TOTAL COST PER UNIT OF PRODUCTION	19.87
(BASED ON ESTIMATED YIELD)	

ESTIMATED 1980 COSTS PER ACRE, CENTRAL NEBRASKA

GRAIN SORGHUM FOR GRAIN, DRYLAND

CROPLAND ACRES	632.0	EXPECTED YIELD PER ACRE	55.0
ACRES THIS CROP	120.0	ANIMAL UNITS OF GRAZING	1.0

JOB	ACRES/ HOUR	PURCHASED		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
TANDEM DISC	10.63			1.12	1.58	2.69
TANDEM DISC	10.63			1.12	1.58	2.69
ANHYDROUS APPLICATOR	6.87			1.52	1.83	3.35
ANHY NITROGEN		65.00	7.80			7.80
PLANTER (FERT., HERB., ETC.)	4.95			1.91	2.55	4.46
SEED		0.05	2.50			2.50
HERBICIDE BAND		1.00	6.00			6.00
ROW CROP CULTIVATOR	5.35			1.29	1.38	2.66
ROW CROP CULTIVATOR	5.35			1.29	1.38	2.66
COMBINE, GRAIN HEAD	4.50			2.84	6.44	9.28
HAUL & BIN	4.62			0.77	1.68	2.45
AUGER	0.0			0.18	0.53	0.71
DRYER	20.00			3.91	2.81	6.72

CASH COSTS

PURCHASED INPUTS	16.30
VARIABLE MACHINERY COSTS	15.93
INTEREST ON OPERATING EXPENSE	2.38
(TOT. VARIABLE COSTS X 11.0 % X 0.7 YRS.)	
TOTAL CASH COSTS	34.61

LABOR

DIRECT LABOR	8.39
(1.4 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	43.00

FIXED COSTS

FIXED MACHINERY COSTS	21.75
TAXES ON LAND (\$ 750 VALUE/ACRE X 1%)	7.50
INTEREST ON LAND (\$ 750 VALUE/ACRE X 6%)	45.00
TOTAL FIXED COSTS	74.25
TOTAL COST, EXCEPT OVERHEAD AND MGT.	117.24

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	1.73
MANAGEMENT CHARGE	5.50
(\$ 0.10 X ESTIMATED YIELD)	
TOTAL OVERHEAD AND MANAGEMENT	7.23
TOTAL COST PER ACRE	124.47
TOTAL COST PER UNIT OF PRODUCTION	2.26
(BASED ON ESTIMATED YIELD)	

ESTIMATED 1980 COSTS PER ACRE, CENTRAL NEBRASKA

SOYBEANS, NON-IRRIGATED

CROPLAND ACRES	632.0	EXPECTED YIELD PER ACRE	25.0
ACRES THIS CROP	29.0	ANIMAL UNITS OF GRAZING	0.0

JOB	ACRES/ HOUR	PURCHASED INPUTS		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
TANDEM DISC	10.63			1.12	1.58	2.69
TANDEM DISC	10.63			1.12	1.58	2.69
PLANTER (FERT., HERB., ETC)	4.95			1.91	2.55	4.46
SEED		1.00	9.00			9.00
INOCULANT		1.00	0.50			0.50
HERBICIDE		1.00	7.50			7.50
HANDWEED		0.50	1.50			1.50
ROW CROP CULTIVATOR	5.35			1.29	1.38	2.66
ROW CROP CULTIVATOR	5.35			1.29	1.38	2.66
COMBINE, GRAIN HEAD	4.00			3.08	6.76	9.84
HAUL & BIN	4.00			0.80	1.68	2.48
AUGER	0.0			0.18	0.53	0.71

CASH COSTS

PURCHASED INPUTS	18.50
VARIABLE MACHINERY COSTS	10.79
INTEREST ON OPERATING EXPENSE	2.16
(TOT. VARIABLE COSTS X 11.0 % X 0.7 YRS.)	
TOTAL CASH COSTS	31.43

LABOR

DIRECT LABOR	7.58
(1.3 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	39.02

FIXED COSTS

FIXED MACHINERY COSTS	17.42
TAXES ON LAND (\$ 750 VALUE/ACRE X 1%)	7.50
INTEREST ON LAND (\$ 750 VALUE/ACRE X 6%)	45.00
TOTAL FIXED COSTS	69.92
TOTAL COST, EXCEPT OVERHEAD AND MGT.	108.94

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	1.57
MANAGEMENT CHARGE (\$ 0.30 X ESTIMATED YIELD)	7.50
TOTAL OVERHEAD AND MANAGEMENT	9.07
TOTAL COST PER ACRE	118.01
TOTAL COST PER UNIT OF PRODUCTION (BASED ON ESTIMATED YIELD)	4.72

*The price of production pay for these years of interest and taxes.

ESTIMATED 1980 COSTS PER ACRE, CENTRAL NEBRASKA

WHEAT FOR GRAIN; CONTINUOUS CROPPED; DRYLAND

CROPLAND ACRES 632.0
ACRES THIS CROP 120.0

EXPECTED YIELD PER ACRE 37.0
ANIMAL UNITS OF GRAZING 0.0

JOB	ACRES/ HOUR	PURCHASED		MACHINE COSTS	
		AMOUNT	VALUE	VARIABLE	FIXED TOTAL
CHISEL	9.16			1.71	2.00 3.71
TANDEM DISC	10.63			1.12	1.58 2.69
FIELD CULTIVATOR	12.22			1.20	1.67 2.87
ANHYDROUS APPLICATOR	6.87			1.52	1.83 3.35
ANHY NITROGEN		40.00	4.80		4.80
GRAIN DRILL	5.62			1.61	3.18 4.79
SEED		1.00	4.50		4.50
18 46 0		40.00	6.00		6.00
COMBINE, GRAIN HEAD	5.00			2.63	6.16 8.80
HAUL & BIN	5.00			0.74	1.68 2.42
AUGER	0.0			0.18	0.55 0.73

CASH COSTS

PURCHASED INPUTS 15.30
VARIABLE MACHINERY COSTS 10.70
INTEREST ON OPERATING EXPENSE 1.92
(TOT. VARIABLE COSTS X 11.0 % X 0.7 YRS.)
TOTAL CASH COSTS 27.92

LABOR

DIRECT LABOR 6.05
(1.0 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))
TOTAL CASH COSTS & LABOR 33.97

FIXED COSTS

FIXED MACHINERY COSTS 18.65
TAXES ON LAND (\$ 750 VALUE/ACRE X 1%) 7.50
INTEREST ON LAND (\$ 750 VALUE/ACRE X 6%) 45.00
TOTAL FIXED COSTS 71.15
TOTAL COST, EXCEPT OVERHEAD AND MGT. 105.12

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%) 1.40
MANAGEMENT CHARGE 5.55
(\$ 0.15 X ESTIMATED YIELD)
TOTAL OVERHEAD AND MANAGEMENT 6.95
TOTAL COST PER ACRE 112.06
TOTAL COST PER UNIT OF PRODUCTION 3.03
(BASED ON ESTIMATED YIELD)

ESTIMATED 1980 COSTS PER ACRE, CENTRAL NEBRASKA

WHEAT FOR GRAIN; FALLOW EVERY THIRD YEAR; DRYLAND

CROPLAND ACRES	632.0	EXPECTED YIELD PER ACRE	46.0
ACRES THIS CROP	120.0	ANIMAL UNITS OF GRAZING	0.0

JOB	ACRES/ HOUR	PURCHASED INPUTS		MACHINE COSTS	
		AMOUNT	VALUE	VARIABLE	FIXED TOTAL
CHISEL	10.18			1.60	1.90 3.51
CHISEL	10.18			1.60	1.90 3.51
TANDEM DISC	10.63			1.12	1.58 2.69
FIELD CULTIVATOR	12.22			1.20	1.67 2.87
FIELD CULTIVATOR	12.22			1.20	1.67 2.87
ANHYDROUS APPLICATOR	6.87			1.52	1.83 3.35
ANHY NITROGEN		40.00	4.80		4.80
GRAIN DRILL	5.62			1.61	3.18 4.79
SEED		1.00	4.50		4.50
18 46 0		0.15	6.00		6.00
COMBINE, GRAIN HEAD	5.00			2.63	6.16 8.80
HAUL & BIN	5.00			0.77	1.68 2.45
AUGER	0.0			0.18	0.55 0.73

CASH COSTS

PURCHASED INPUTS	15.30
VARIABLE MACHINERY COSTS	13.43
INTEREST ON OPERATING EXPENSE	2.12
(TOT. VARIABLE COSTS X 11.0 % X 0.7 YRS.)	
TOTAL CASH COSTS	30.85

LABOR

DIRECT LABOR	7.07
(1.2 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	37.91

FIXED COSTS

FIXED MACHINERY COSTS	22.13
TAXES ON LAND (\$1125 VALUE/ACRE X 1%)*	11.25
INTEREST ON LAND (\$1125 VALUE/ACRE X 6%)*	67.50
TOTAL FIXED COSTS	100.88
TOTAL COST, EXCEPT OVERHEAD AND MGT.	138.79

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	1.54
MANAGEMENT CHARGE	6.90
(\$ 0.15 X ESTIMATED YIELD)	
TOTAL OVERHEAD AND MANAGEMENT	8.44
TOTAL COST PER ACRE	147.23
TOTAL COST PER UNIT OF PRODUCTION	3.20

(BASED ON ESTIMATED YIELD)
 *Two years of production pay for three years of interest and taxes

ESTIMATED 1980 COSTS PER ACRE, CENTRAL NEBRASKA

ESTABLISH ALFALFA, DRYLAND

CROPLAND ACRES 632.0
ACRES THIS CROP 40.0

EXPECTED YIELD PER ACRE 0.0
ANIMAL UNITS OF GRAZING 0.0

JOB	ACRES/ HOUR	PURCHASED INPUTS		MACHINE COSTS	
		AMOUNT	VALUE	VARIABLE	FIXED TOTAL
CHISEL	10.18			1.60	1.90 3.51
CHISEL	10.18			1.60	1.90 3.51
TANDEM DISC	10.63			1.12	1.58 2.69
TANDEM DISC	10.63			1.12	1.58 2.69
BROADCAST SPREADER	7.50			0.76	0.75 1.51
SPREADER RENTAL		1.00	1.50		1.50
STARTER P205		40.00	10.00		10.00
SPIKE TOOTH HARROW	10.38			0.56	1.50 2.05
GRAIN DRILL	4.50			1.26	1.25 2.51
DRILL RENTAL		1.00	2.00		2.00
SEED		7.00	15.75		15.75

CASH COSTS

PURCHASED INPUTS	29.25
VARIABLE MACHINERY COSTS	8.02
INTEREST ON OPERATING EXPENSE	2.75
(TOT. VARIABLE COSTS X 11.0 % X 0.7 YRS.)	
TOTAL CASH COSTS	40.02

LABOR

DIRECT LABOR	5.02
(0.8 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	45.04

FIXED COSTS

FIXED MACHINERY COSTS	10.45
TAXES ON LAND (\$ 0 VALUE/ACRE X 1%)	0.0
INTEREST ON LAND (\$ 0 VALUE/ACRE X 6%)	0.0
TOTAL FIXED COSTS	10.45
TOTAL COST, EXCEPT OVERHEAD AND MGT.	55.49

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	2.00
MANAGEMENT CHARGE	0.0
(\$ 0.0 X ESTIMATED YIELD)	
TOTAL OVERHEAD AND MANAGEMENT	2.00
TOTAL COST PER ACRE	57.49

ESTIMATED 1980 COSTS PER ACRE, CENTRAL NEBRASKA

ALFALFA FOR HAY, DRYLAND

CROPLAND ACRES	632.0	EXPECTED YIELD PER ACRE	2.8
ACRES THIS CROP	40.0	ANIMAL UNITS OF GRAZING	0.0

JOB	ACRES/ HOUR	PURCHASED		MACHINE COSTS	
		AMOUNT	VALUE	VARIABLE	FIXED TOTAL
SPIKE TOOTH HARROW	10.38			0.59	1.60 2.20
WINDROWER	(CUSTOM OP.)			6.25	6.25
WINDROWER	(CUSTOM OP.)			6.25	6.25
WINDROWER	(CUSTOM OP.)			6.25	6.25
BALER, REGULAR	(CUSTOM OP.)			7.75	7.75
BALER, REGULAR	(CUSTOM OP.)			7.75	7.75
BALER, REGULAR	(CUSTOM OP.)			7.75	7.75
BALE HAULING	4.00			1.02	2.83 3.85
BALE HAULING	4.00			1.02	2.83 3.85
BALE HAULING	4.00			1.02	2.83 3.85

CASH COSTS

PURCHASED INPUTS	0.0
VARIABLE MACHINERY COSTS	45.65
INTEREST ON OPERATING EXPENSE	3.36
(TOT. VARIABLE COSTS X 11.0 % X 0.7 YRS.)	
TOTAL CASH COSTS	49.02

LABOR

DIRECT LABOR	5.08
(0.8 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	54.10

SHARE OF SEEDING COSTS	11.50
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FIXED COSTS

FIXED MACHINERY COSTS	10.09
TAXES ON LAND (\$ 750 VALUE/ACRE X 1%)	7.50
INTEREST ON LAND (\$ 750 VALUE/ACRE X 6%)	45.00
TOTAL FIXED COSTS	74.09
TOTAL COST, EXCEPT OVERHEAD AND MGT.	128.19

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	2.45
MANAGEMENT CHARGE	5.60
(\$ 2.00 X ESTIMATED YIELD)	
TOTAL OVERHEAD AND MANAGEMENT	8.05
TOTAL COST PER ACRE	136.24
TOTAL COST PER UNIT OF PRODUCTION	48.66
(BASED ON ESTIMATED YIELD)	

DESCRIPTION OF NORTHEAST NEBRASKA BENCHMARK FARM

This farm is located in the rolling hills, with Loess, Moody-Crofton soils. Several enterprise budgets (center pivot irrigated corn and alfalfa seeding) are more typical of the sandy areas of Pierce, Antelope and Holt Counties. The remainder of the budgets for this area are for crops produced on the benchmark farm.

Labor is usually supplied by the operator and his family. Some seasonal hired labor may be required such as hauling grain and roguing of soybeans.

Typical Farm - Total Acres 480

Corn	240	Alfalfa	40
Soybeans	120	Pasture, farmstead	40
Oats	40	& roads	

Two 1/4 section center pivots were budgeted on the sandy soils which is more typical west of highway 81.

Machinery Inventory and Practices

Tractor #1 100-110 hp diesel w/cab \$29,746
 Tractor #2 70-80 hp diesel w/cab \$26,966
 Disc 21' tandem \$8,000
 Plow 5-14', \$3,910 assume 1/2 of corn land is plowed.
 Planter 4R - 38", \$5,350. Irig. sandy land used 6R-30" \$6,750
 Fertilizer applicator - for dry or liquid materials, use custom bulk floater spreader. Anhydrous ammonia applicator and supply tank are rented from fertilizer supplier.
 Cultivator 4R mounted \$2,800
 Rotary hoe 4R \$2,200, used when chemicals not applied, not included in practices
 High Boy or Aerial Spraying - custom hired for cornborer control
 Ground Sprayer 10R - 35', \$1,465 Pull type w/500 gal. tank
 Combine Base unit, 4400 JD or equiv. \$28,449, w/4R cornhead \$8,500
 13' small grain head \$3,015 and 10' pickup attachment \$2,500.
 Assumes that custom combining will be done in addition to own acreage. Custom rates are used on sandy land center pivots.
 Hauling is done 1/3 by truck and 2/3 by wagons. Custom rates are used @ .075/bu for rolling hills and @ .12/bu on sandy pivots.
 Drying is done in drying bin or batch dryer. Custom rates are used for cost.
 Auger w/PTO 8" - 50' \$2,000
 Endgate Wagon Seeder - \$350, for oats and alfalfa seeding.
 Drill - \$3,000, Packer \$2,000
 Swather - 14' self-propelled \$18,000 or 12' pull-type \$7,700.
 Assume additional custom work will be done.
 Big Round Baler - \$8,400, used on 420 Acres/year including some oat straw, including custom work.
 Stacker - 3 Ton cap. \$11,800, used on 500 acres, incl. custom work
 Stack moving - Custom hire rates used.
 Conservation Tillage - 6R - 30" planter \$7,500. This practice is considered by some farms and is treated as a separate budget.

ESTIMATED 1980 COSTS PER ACRE, NORTHEAST NEBRASKA

CORN FOR GRAIN, CENTER PIVOT IRRIGATED, DIESEL, SANDY SOIL

CROPLAND ACRES	640.0	EXPECTED YIELD PER ACRE	140.0			
ACRES THIS CROP	264.0	ANIMAL UNITS OF GRAZING	2.5			
JOB	ACRES/ HOUR	PURCHASED INPUTS AMOUNT	VALUE	MACHINE COSTS VARIABLE	FIXED	TOTAL
TANDEM DISC	10.63			1.02	1.65	2.67
ANHYDROUS APPLICATOR	4.91			1.52	1.25	2.77
(MACHINE RENTED, TRACTOR OWNED)						
NITROGEN - NH3		140.00	16.80			16.80
TANDEM DISC	10.63			1.02	1.65	2.67
PLANTER (FERT.,HERB.,ETC)	4.95			2.44	2.99	5.44
SEED, SINGLE X		0.33	18.15			18.15
8-20-6-5-1		200.00	24.00			24.00
HERBICIDE		1.00	6.00			6.00
INSECTICIDE		1.00	8.00			8.00
LIQ N THRU SYSTM		40.00	8.80			8.80
ROW CROP CULTIVATOR	5.35			1.60	1.93	3.53
BROADCAST SPREADER	(CUSTOM OP.)			2.50		2.50
18-46-0		46.00	6.44			6.44
SUL-PO-MAG		100.00	6.00			6.00
COMBINE,CORN HEAD	(CUSTOM OP.)			20.00		20.00
FEED WAGON (POWER)	(CUSTOM OP.)			3.25		3.25
TRUCK	(CUSTOM OP.)			17.50		17.50
DRIER	(CUSTOM OP.)			21.00		21.00
IRRIGATE 12 IN.	2.00			47.99	56.25	104.24
CASH COSTS						
PURCHASED INPUTS				94.19		
VARIABLE MACHINERY COSTS				119.85		
INTEREST ON OPERATING EXPENSE				15.77		
(TOT. VARIABLE COSTS X11.0 % X 0.7 YRS.)						
TOTAL CASH COSTS						229.81
LABOR						
DIRECT LABOR				7.68		
(1.3 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))						
TOTAL CASH COSTS & LABOR						237.50
FIXED COSTS						
FIXED MACHINERY COSTS				65.71		
TAXES ON LAND (\$ 800 VALUE/ACRE X 1%)				8.00		
INTEREST ON LAND (\$ 800 VALUE/ACRE X 6%)				48.00		
TOTAL FIXED COSTS						121.71
TOTAL COST, EXCEPT OVERHEAD AND MGT.						359.21
OVERHEAD AND MANAGEMENT						
OVERHEAD (TOTAL CASH COSTS X 5%)				11.49		
MANAGEMENT CHARGE				14.00		
(\$ 0.10 X ESTIMATED YIELD)						
TOTAL OVERHEAD AND MANAGEMENT						25.49
TOTAL COST PER ACRE						384.70
TOTAL COST PER UNIT OF PRODUCTION						2.75
(BASED ON ESTIMATED YIELD)						

CORN FOR GRAIN, CENTER PIVOT IRRIGATED, ELEC., ROLLING HILLS

CROPLAND ACRES	480.0	EXPECTED YIELD PER ACRE	130.0
ACRES THIS CROP	132.0	ANIMAL UNITS OF GRAZING	2.5

JOB	ACRES/ HOUR	PURCHASED		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
TANDEM DISC	10.63			1.09	1.87	2.97
ANHYDROUS APPLICATOR	6.87			1.08	0.89	1.98
(MACHINE RENTED, TRACTOR OWNED)						
APPLICATOR RENT		1.00	1.25			1.25
NITROGEN - NH4		130.00	15.60			15.60
TANDEM DISC	10.63			1.09	1.87	2.97
PLANTER (FERT., HERB., ETC)	4.29			2.39	3.38	5.77
SEED, SINGLE X		0.33	18.15			18.15
10-34-0		125.00	13.75			13.75
INSECTICIDE		1.00	8.00			8.00
HERBICIDE		1.00	6.00			6.00
LIQ N THRU SYSTM		30.00	6.60			6.60
ROW CROP CULTIVATOR	4.64			1.69	1.99	3.68
ROW CROP CULTIVATOR	4.64			1.69	1.99	3.68
COMBINE, CORN HEAD	2.71			4.38	9.37	13.75
SPRAYER	(CUSTOM OP.)			1.25		1.25
BORER SPRY 1/2 YR		1.00	3.20			3.20
DRIER	(CUSTOM OP.)			19.50		19.50
TRUCK	(CUSTOM OP.)			9.75		9.75
IRRIGATE 9 IN.	2.00			36.20	53.38	89.58
GRAIN AUGER	6.00			0.26	1.30	1.56

CASH COSTS

PURCHASED INPUTS	72.55
VARIABLE MACHINERY COSTS	80.38
INTEREST ON OPERATING EXPENSE	11.27
(TOT. VARIABLE COSTS X 11.0 % X 0.7 YRS.)	
TOTAL CASH COSTS	164.20

LABOR

DIRECT LABOR	12.20
(2.0 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	176.40

FIXED COSTS

FIXED MACHINERY COSTS	76.05
TAXES ON LAND (\$1000 VALUE/ACRE X 1%)	10.00
INTEREST ON LAND (\$1000 VALUE/ACRE X 6%)	60.00
TOTAL FIXED COSTS	146.05
TOTAL COST, EXCEPT OVERHEAD AND MGT.	322.45

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	8.21
MANAGEMENT CHARGE	13.00
(\$ 0.10 X ESTIMATED YIELD)	
TOTAL OVERHEAD AND MANAGEMENT	21.21
TOTAL COST PER ACRE	343.66
TOTAL COST PER UNIT OF PRODUCTION	2.64
(BASED ON ESTIMATED YIELD)	

ESTIMATED 1980 COSTS PER ACRE, NORTHEAST NEBRASKA

CORN FOR GRAIN, NON-IRRIGATED

CROPLAND ACRES	480.0	EXPECTED YIELD PER ACRE	75.0
ACRES THIS CROP	240.0	ANIMAL UNITS OF GRAZING	2.0

JOB	ACRES/ HOUR	PURCHASED INPUTS		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
ANHYDROUS APPLICATOR	6.87			1.08	0.89	1.98
(MACHINE RENTED, TRACTOR OWNED)						
NITROGEN - NH ₃		80.00	9.60			9.60
APPLICATOR RENT		1.00	1.25			1.25
TANDEM DISC	10.63			1.09	1.87	2.97
MOLDBOARD PLOW	2.60			3.30	3.25	6.55
TANDEM DISC	10.63			1.09	1.87	2.97
PLANTER (FERT., HERB., ETC)	4.29			2.39	3.38	5.77
SEED - SINGLE X		0.20	11.00			11.00
10-34-0 STRTR		125.00	13.75			13.75
INSECTICIDE		1.00	8.00			8.00
HERBICIDE		1.00	6.00			6.00
ROW CROP CULTIVATOR	4.64			1.69	1.99	3.68
ROW CROP CULTIVATOR	4.64			1.69	1.99	3.68
COMBINE, CORN HEAD	2.71			4.48	9.83	14.31
SPRAYER	(CUSTOM OP.)			0.83		0.83
BORER SPRY 1/3 YR		1.00	2.14			2.14
DRIER	(CUSTOM OP.)			9.50		9.50
TRUCK	(CUSTOM OP.)			5.63		5.63

GRAIN AUGER	8.57			0.15	0.75	0.90
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CASH COSTS

PURCHASED INPUTS	51.74
VARIABLE MACHINERY COSTS	32.93
INTEREST ON OPERATING EXPENSE	6.24
(TOT. VARIABLE COSTS X 11.0 % X 0.7 YRS.)	
TOTAL CASH COSTS	90.91

LABOR

DIRECT LABOR	11.21
(1.9 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	102.12

FIXED COSTS

FIXED MACHINERY COSTS	25.83
TAXES ON LAND (\$ 825 VALUE/ACRE X 1%)	8.25
INTEREST ON LAND (\$ 825 VALUE/ACRE X 6%)	49.50
TOTAL FIXED COSTS	83.58
TOTAL COST, EXCEPT OVERHEAD AND MGT.	185.71

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	4.55
MANAGEMENT CHARGE	7.50
(\$ 0.10 X ESTIMATED YIELD)	
TOTAL OVERHEAD AND MANAGEMENT	12.05
TOTAL COST PER ACRE	197.75
TOTAL COST PER UNIT OF PRODUCTION	2.64
(BASED ON ESTIMATED YIELD)	

ESTIMATED 1980 COSTS PER ACRE, NORTHEAST NEBRASKA

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CORN FOR GRAIN, CONSERVATION TILLAGE

CROPLAND ACRES	480.0	EXPECTED YIELD PER ACRE	75.0
ACRES THIS CROP	240.0	ANIMAL UNITS OF GRAZING	2.0

JOB	ACRES/ HOUR	PURCHASED		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
ANHYDROUS APPLICATOR	6.87			1.08	0.89	1.98
(MACHINE RENTED, TRACTOR OWNED)						
NITROGEN - NH3		100.00	12.00			12.00
APPLICATOR RENT		1.00	1.25			1.25
TANDEM DISC	10.63			1.09	1.87	2.97
PLANTER (FERT., HERB., ETC)	4.95			3.33	4.64	7.97
SEED, 3X		0.20	10.00			10.00
10-34-0 STRTR		125.00	14.37			14.37
INSECTICIDE		1.00	8.00			8.00
HERBICIDE		1.00	6.00			6.00
ROW CROP CULTIVATOR	5.35			1.51	1.80	3.31
ROW CROP CULTIVATOR	5.35			1.51	1.80	3.31
SPRAYER	13.79			0.49	0.95	1.44
2,4-D		1.00	1.50			1.50
COMBINE, CORN HEAD	2.71			4.52	10.00	14.53
SPRAYER	(CUSTOM OP.)			0.83		0.83
BORER SPRY 1/3 YR		1.00	2.14			2.14
DRIER	(CUSTOM OP.)			9.50		9.50
TRUCK	(CUSTOM OP.)			5.63		5.63
GRAIN AUGER	8.57			0.15	0.75	0.90

CASH COSTS

PURCHASED INPUTS	55.26
VARIABLE MACHINERY COSTS	29.65
INTEREST ON OPERATING EXPENSE	6.26
(TOT. VARIABLE COSTS X 11.0 % X 0.7 YRS.)	
TOTAL CASH COSTS	91.18

LABOR

DIRECT LABOR	8.24
(1.4 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	99.42

FIXED COSTS

FIXED MACHINERY COSTS	22.72
TAXES ON LAND (\$ 825 VALUE/ACRE X 1%)	8.25
INTEREST ON LAND (\$ 825 VALUE/ACRE X 6%)	49.50
TOTAL FIXED COSTS	80.47
TOTAL COST, EXCEPT OVERHEAD AND MGT.	179.88

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	4.56
MANAGEMENT CHARGE	7.50
(\$ 0.10 X ESTIMATED YIELD)	
TOTAL OVERHEAD AND MANAGEMENT	12.06
TOTAL COST PER ACRE	191.94
TOTAL COST PER UNIT OF PRODUCTION	2.56
(BASED ON ESTIMATED YIELD)	

ESTIMATED 1980 COSTS PER ACRE, NORTHEAST NEBRASKA

SOYBEANS, NON-IRRIGATED

CROPLAND ACRES	480.0	EXPECTED YIELD PER ACRE	30.0
ACRES THIS CROP	100.0	ANIMAL UNITS OF GRAZING	0.0

JOB	ACRES/ HOUR	PURCHASED		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
TANDEM DISC	10.63			1.09	1.87	2.97
MOLDBOARD FLOW	2.60			3.54	3.72	7.26
TANDEM DISC	10.63			1.09	1.87	2.97
PLANTER (FERT., HERB., ETC)	4.29			2.39	3.38	5.77
SEED		1.00	9.00			9.00
HERBICIDE		1.00	7.50			7.50
INNOCULANT		1.00	0.30			0.30
ROW CROP CULTIVATOR	4.64			1.69	1.99	3.68
ROW CROP CULTIVATOR	4.64			1.69	1.99	3.68
COMBINE, GRAIN HEAD	2.92			4.03	10.02	14.05
ROGUE LABOR		1.00	3.00			3.00
TRUCK (CUSTOM OP.)				2.25		2.25
GRAIN AUGER	12.00			0.05	0.35	0.40
CASH COSTS						
PURCHASED INPUTS				19.80		
VARIABLE MACHINERY COSTS				17.82		
INTEREST ON OPERATING EXPENSE				2.48		
(TOT. VARIABLE COSTS X 11.0 % X 0.6 YRS.)						
TOTAL CASH COSTS						40.10
LABOR						
DIRECT LABOR				9.97		
(1.7 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))						
TOTAL CASH COSTS & LABOR						50.07
FIXED COSTS						
FIXED MACHINERY COSTS				25.21		
TAXES ON LAND (\$ 825 VALUE/ACRE X 1%)				8.25		
INTEREST ON LAND (\$ 825 VALUE/ACRE X 6%)				49.50		
TOTAL FIXED COSTS						82.96
TOTAL COST, EXCEPT OVERHEAD AND MGT.						133.03
OVERHEAD AND MANAGEMENT						
OVERHEAD (TOTAL CASH COSTS X 5%)				2.01		
MANAGEMENT CHARGE (\$ 0.30 X ESTIMATED YIELD)				9.00		
TOTAL OVERHEAD AND MANAGEMENT						11.01
TOTAL COST PER ACRE						144.04
TOTAL COST PER UNIT OF PRODUCTION (BASED ON ESTIMATED YIELD)						4.80

ESTIMATED 1980 COSTS PER ACRE, NORTHEAST NEBRASKA

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SOYBEANS, CENTER PIVOT IRRIGATED

CROPLAND ACRES	480.0	EXPECTED YIELD PER ACRE	50.0
ACRES THIS CROP	100.0	ANIMAL UNITS OF GRAZING	0.0

JOB	ACRES/ HOUR	PURCHASED INPUTS		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
TANDEM DISC	10.63			1.09	1.87	2.97
MOLDBOARD FLOW	2.60			3.31	3.27	6.58
TANDEM DISC	10.63			1.09	1.87	2.97
PLANTER (FERT., HERB., ETC)	4.29			2.39	3.38	5.77
SEED		1.00	9.00			9.00
INNOCULANT		1.00	0.30			0.30
HERBICIDE		1.00	7.50			7.50
ROW CROP CULTIVATOR	4.64			1.69	1.99	3.68
COMBINE, GRAIN HEAD	2.92			4.03	10.02	14.05
BROADCAST SPREADER	(CUSTOM OP.)			2.50		2.50
PHOS., P205		30.00	7.50			7.50
ROGUE LABOR		1.00	3.00			3.00
TRUCK	(CUSTOM OP.)			3.75		3.75
IRRIGATE 6 IN.	3.00			24.13	53.38	77.51
GRAIN AUGER	8.57			0.10	0.50	0.60

CASH COSTS

PURCHASED INPUTS	27.30
VARIABLE MACHINERY COSTS	44.09
INTEREST ON OPERATING EXPENSE	4.71
(TOT. VARIABLE COSTS X 11.0 % X 0.6 YRS.)	
TOTAL CASH COSTS	76.10

LABOR

DIRECT LABOR	10.88
(1.8 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	86.98

FIXED COSTS

FIXED MACHINERY COSTS	76.29
TAXES ON LAND (\$1000 VALUE/ACRE X 1%)	10.00
INTEREST ON LAND (\$1000 VALUE/ACRE X 6%)	60.00
TOTAL FIXED COSTS	146.29
TOTAL COST, EXCEPT OVERHEAD AND MGT.	233.27

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	3.81
MANAGEMENT CHARGE	15.00
(\$ 0.30 X ESTIMATED YIELD)	
TOTAL OVERHEAD AND MANAGEMENT	18.81
TOTAL COST PER ACRE	252.08
TOTAL COST PER UNIT OF PRODUCTION	5.04
(BASED ON ESTIMATED YIELD)	

ESTIMATED 1980 COSTS PER ACRE, NORTHEAST NEBRASKA

OATS, NON-IRRIGATED

CROPLAND ACRES	480.0	EXPECTED YIELD PER ACRE	80.0
ACRES THIS CROP	40.0	ANIMAL UNITS OF GRAZING	1.0

JOB	ACRES/ HOUR	PURCHASED INPUTS		MACHINE COSTS		
		AMOUNT	VALUE	VARIABLE	FIXED	TOTAL
TANDEM DISC	10.63			1.09	1.87	2.97
BROADCAST SEEDER	9.72			0.70	1.31	2.01
SEED		3.50	7.00			7.00
TANDEM DISC	10.63			1.09	1.87	2.97
SPIKE TOOTH HARROW	*****			0.01	0.83	0.84
WINDROWER	2.29			3.25	4.72	7.97
COMBINE, PICKUP	2.55			4.14	9.14	13.27
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BROADCAST SPREADER	(CUSTOM OP.)			2.50		2.50
30-10-0		200.00	18.00			18.00
TRUCK	(CUSTOM OP.)			6.00		6.00
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GRAIN AUGER	8.57			0.15	0.75	0.90

CASH COSTS

PURCHASED INPUTS	25.00
VARIABLE MACHINERY COSTS	18.93
INTEREST ON OPERATING EXPENSE	1.59
(TOT. VARIABLE COSTS X 11.0 % X 0.3 YRS.)	
TOTAL CASH COSTS	45.53

LABOR

DIRECT LABOR	7.42
(1.2 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	52.95

FIXED COSTS

FIXED MACHINERY COSTS	20.49
TAXES ON LAND (\$ 825 VALUE/ACRE X 1%)	8.25
INTEREST ON LAND (\$ 825 VALUE/ACRE X 6%)	49.50
TOTAL FIXED COSTS	78.24
TOTAL COST, EXCEPT OVERHEAD AND MGT.	131.19

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	2.28
MANAGEMENT CHARGE	6.40
(\$ 0.08 X ESTIMATED YIELD)	
TOTAL OVERHEAD AND MANAGEMENT	8.68
TOTAL COST PER ACRE	139.87
TOTAL COST PER UNIT OF PRODUCTION	1.75
(BASED ON ESTIMATED YIELD)	

ESTIMATED 1980 COSTS PER ACRE, NORTHEAST NEBRASKA

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OATS CHOP WITH SPRING ALFALFA SEEDING*

CROPLAND ACRES	480.0	EXPECTED YIELD PER ACRE	3.0
ACRES THIS CROP	40.0	ANIMAL UNITS OF GRAZING	0.0

JOB	ACRES/ HOUR	PURCHASED		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
TANDEM DISC	10.63			1.09	1.87	2.97
BROADCAST SEEDER	9.72			0.70	1.31	2.01
OAT SEED		3.50	7.00			7.00
TANDEM DISC	10.63			1.09	1.87	2.97
BROADCAST SEEDER	9.72			0.70	1.31	2.01
ALFALFA SEED		12.00	27.00			27.00
SPIKE TOOTH HARROW	12.45			0.50	1.86	2.36
WINDROWER	2.29			3.25	4.72	7.97
BROADCAST SPREADER	(CUSTOM OP.)			2.50		2.50
NITROGEN - DRY		60.00	13.20			13.20
PHOSPHORUS - DRY		60.00	15.00			15.00
FORAGE CHOPPER	(CUSTOM OP.)			23.75		23.75
& WAGONS						
*OATS HARVESTED AS OATLAGE						
CASH COSTS						
PURCHASED INPUTS				62.20		
VARIABLE MACHINERY COSTS				33.59		
INTEREST ON OPERATING EXPENSE				3.48		
(TOT. VARIABLE COSTS X 11.0 % X 0.3 YRS.)						
TOTAL CASH COSTS						99.27
LABOR						
DIRECT LABOR				5.47		
(0.9 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))						
TOTAL CASH COSTS & LABOR						104.73
FIXED COSTS						
FIXED MACHINERY COSTS				12.95		
TAXES ON LAND (\$ 825 VALUE/ACRE X 1%)				8.25		
INTEREST ON LAND (\$ 825 VALUE/ACRE X 6%)				49.50		
TOTAL FIXED COSTS						70.70
TOTAL COST, EXCEPT OVERHEAD AND MGT.						175.43
OVERHEAD AND MANAGEMENT						
OVERHEAD (TOTAL CASH COSTS X 5%)				4.96		
MANAGEMENT CHARGE				0.24		
(\$ 0.08 X ESTIMATED YIELD)						
TOTAL OVERHEAD AND MANAGEMENT						5.20
TOTAL COST PER ACRE						180.63
TOTAL COST PER UNIT OF PRODUCTION						60.21
(BASED ON ESTIMATED YIELD)						

ESTIMATED 1980 COSTS PER ACRE, NORTHEAST NEBRASKA

ALFALFA SEEDING COST SHARE WITH OATS

CROPLAND ACRES	480.0	EXPECTED YIELD PER ACRE	0.0
ACRES THIS CROP	40.0	ANIMAL UNITS OF GRAZING	0.0

JOB	ACRES/ HOUR	PURCHASED INPUTS		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
GRAIN DRILL	3.52			2.47	4.62	7.09
ALFALFA SEED		12.00	27.00			27.00
SPIKE TOOTH HARROW	8.30			0.74	2.13	2.88
BROADCAST SPREADER	(CUSTOM OP.)			2.50		2.50
PHOS., P205		40.00	10.00			10.00

CASH COSTS

PURCHASED INPUTS	37.00
VARIABLE MACHINERY COSTS	5.71
INTEREST ON OPERATING EXPENSE	4.70
(TOT. VARIABLE COSTS X 11.0 % X 1.0 YRS.)	
TOTAL CASH COSTS	47.41

LABOR

DIRECT LABOR	2.43
(0.4 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	49.84

FIXED COSTS

FIXED MACHINERY COSTS	6.75
TAXES ON LAND (\$ 0 VALUE/ACRE X 1%)	0.0
INTEREST ON LAND (\$ 0 VALUE/ACRE X 6%)	0.0
TOTAL FIXED COSTS	6.75
TOTAL COST, EXCEPT OVERHEAD AND MGT.	56.60

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	2.37
MANAGEMENT CHARGE	0.0
(\$ 2.00 X ESTIMATED YIELD)	
TOTAL OVERHEAD AND MANAGEMENT	2.37
TOTAL COST PER ACRE	58.97

ESTIMATED 1980 COSTS PER ACRE, NORTHEAST NEBRASKA

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ALFALFA ESTABLISHMENT, SANDY SOIL, FALL SEEDING

CROPLAND ACRES	480.0	EXPECTED YIELD PER ACRE	0.0
ACRES THIS CROP	40.0	ANIMAL UNITS OF GRAZING	0.0

JOB	ACRES/ HOUR	PURCHASED		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
TANDEM DISC	10.63			1.09	1.87	2.97
TANDEM DISC	10.63			1.09	1.87	2.97
GRAIN DRILL	3.52			2.47	4.62	7.09
ALFALFA SEED		12.00	27.00			27.00
ROLLER OR PACKER	4.36			1.41	4.21	5.63
BROADCAST SPREADER	(CUSTOM OP.)			2.50		2.50
18-46-0		100.00	14.00			14.00
SULFUR		30.00	3.00			3.00
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CASH COSTS						
PURCHASED INPUTS				44.00		
VARIABLE MACHINERY COSTS				8.57		
INTEREST ON OPERATING EXPENSE				2.89		
(TOT. VARIABLE COSTS X 11.0 % X 0.5 YRS.)						
TOTAL CASH COSTS						55.46
LABOR						
DIRECT LABOR				4.21		
(0.7 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))						
TOTAL CASH COSTS & LABOR						59.67
FIXED COSTS						
FIXED MACHINERY COSTS				12.58		
TAXES ON LAND (\$ 0 VALUE/ACRE X 1%)				0.0		
INTEREST ON LAND (\$ 0 VALUE/ACRE X 6%)				0.0		
TOTAL FIXED COSTS						12.58
TOTAL COST, EXCEPT OVERHEAD AND MGT.						72.25
OVERHEAD AND MANAGEMENT						
OVERHEAD (TOTAL CASH COSTS X 5%)				2.77		
MANAGEMENT CHARGE				0.0		
(\$ 2.00 X ESTIMATED YIELD)						
TOTAL OVERHEAD AND MANAGEMENT						2.77
TOTAL COST PER ACRE						75.03

ESTIMATED 1980 COSTS PER ACRE, NORTHEAST NEBRASKA

ALFALFA HAY, LARGE ROUND BALER

CROPLAND ACRES	480.0	EXPECTED YIELD PER ACRE	3.0
ACRES THIS CROP	40.0	ANIMAL UNITS OF GRAZING	0.0

JOB	ACRES/ HOUR	PURCHASED INPUTS		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
WINDROWER	3.05			2.82	4.68	7.50
BALER, GIANT	13.55			1.04	2.66	3.69
TWINE		1.33	0.16			0.16
WINDROWER	3.05			2.82	4.68	7.50
BALER, GIANT	13.55			1.04	2.66	3.69
TWINE		1.33	0.16			0.16
WINDROWER	3.05			2.82	4.68	7.50
BALER, GIANT	13.55			1.04	2.66	3.69
TWINE		1.33	0.16			0.16
BROADCAST SPREADER	(CUSTOM OP.)			1.25		1.25
P205, ALT. YRS		20.00	5.00			5.00
BALE MOVING 4/AC.	1.50			0.40	2.80	3.20
CASH COSTS						
PURCHASED INPUTS				5.48		
VARIABLE MACHINERY COSTS				13.21		
INTEREST ON OPERATING EXPENSE				2.06		
(TOT. VARIABLE COSTS X 11.0 % X 1.0 YRS.)						
TOTAL CASH COSTS						20.74
LABOR						
DIRECT LABOR				11.22		
(1.9 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))						
TOTAL CASH COSTS & LABOR						31.97
SHARE OF SEEDING COSTS				14.74		
FIXED COSTS						
FIXED MACHINERY COSTS				24.82		
TAXES ON LAND (\$ 825 VALUE/ACRE X 1%)				8.25		
INTEREST ON LAND (\$ 825 VALUE/ACRE X 6%)				49.50		
TOTAL FIXED COSTS						97.31
TOTAL COST, EXCEPT OVERHEAD AND MGT.						129.27
OVERHEAD AND MANAGEMENT						
OVERHEAD (TOTAL CASH COSTS X 5%)				1.04		
MANAGEMENT CHARGE				6.00		
(\$ 2.00 X ESTIMATED YIELD)						
TOTAL OVERHEAD AND MANAGEMENT						7.04
TOTAL COST PER ACRE						136.31
TOTAL COST PER UNIT OF PRODUCTION						45.44
(BASED ON ESTIMATED YIELD)						

ALFALFA HAY, FIELD STACKER

CROPLAND ACRES	480.0	EXPECTED YIELD PER ACRE	3.0
ACRES THIS CROP	40.0	ANIMAL UNITS OF GRAZING	0.0

JOB	ACRES/ HOUR	PURCHASED		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
WINDROWER	4.07			2.66	4.00	6.66
FIELD LOAF STACKER 3T	2.88			3.58	5.34	8.92
WINDROWER	4.07			2.66	4.00	6.66
FIELD LOAF STACKER 3T	2.88			3.58	5.34	8.92
WINDROWER	4.07			2.66	4.00	6.66
FIELD LOAF STACKER 3T	2.88			3.58	5.34	8.92
BROADCAST SPREADER	(CUSTOM OP.)			1.25		1.25
P205, ALT. YRS		20.00	5.00			5.00
STACK MOVER	(CUSTOM OP.)			2.50		2.50
STACK MOVER	(CUSTOM OP.)			2.50		2.50
STACK MOVER	(CUSTOM OP.)			2.50		2.50
CASH COSTS						
PURCHASED INPUTS				5.00		
VARIABLE MACHINERY COSTS				27.46		
INTEREST ON OPERATING EXPENSE				3.57		
(TOT. VARIABLE COSTS X 11.0 % X 1.0 YRS.)						
TOTAL CASH COSTS						36.03
LABOR						
DIRECT LABOR				10.67		
(1.8 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))						
TOTAL CASH COSTS & LABOR						46.70
SHARE OF SEEDING COSTS				14.74		
FIXED COSTS						
FIXED MACHINERY COSTS				28.04		
TAXES ON LAND (\$ 825 VALUE/ACRE X 1%)				8.25		
INTEREST ON LAND (\$ 825 VALUE/ACRE X 6%)				49.50		
TOTAL FIXED COSTS						100.53
TOTAL COST, EXCEPT OVERHEAD AND MGT.						147.23
OVERHEAD AND MANAGEMENT						
OVERHEAD (TOTAL CASH COSTS X 5%)				1.80		
MANAGEMENT CHARGE				6.00		
(\$ 2.00 X ESTIMATED YIELD)						
TOTAL OVERHEAD AND MANAGEMENT						7.80
TOTAL COST PER ACRE						155.03
TOTAL COST PER UNIT OF PRODUCTION						51.68
(BASED ON ESTIMATED YIELD)						

DESCRIPTION OF EASTERN NEBRASKA BENCHMARK FARM

Most farms in this area have only 3-4 crop enterprises depending upon soils, acquired machinery, grain or feed storage, livestock program, labor available or off farm interests. The acreage listed is considered typical for those who produce that crop. The acreages shown are those typical of each enterprise. Not all of these crops would be grown on every farm every year. Thus, the above list of crop acres total more than the acres in the farm.

The soils in this region are flat to rolling Glaciated of Sharpsburg-Marshall-Shelby with Loess parent material.

Labor is usually supplied by operator and family. Some seasonal hired labor may be required such as hauling grain and roguing soybeans.

Typical Farm - Total tillable Acres 500

Corn	250	New seeding alfalfa	25
Soybeans	125	Alfalfa	25
Wheat	50	Sudex	10
Grain Sorghum	150--some	Pasture, farmstead,	
acres may be interchanged		roads & waste	20
with corn			

Machinery Inventory and Practices

Tractor #1 - 120-130 hp diesel w/cab \$35,350
 Tractor #2 - 80-100 hp diesel w/cab \$26,966
 Plow - 5-14" \$3,900 used on wheatland
 Chisel Plow - 12', \$3,200
 Anhydrous ammonia applicator - rented from supplier
 Tandem Disc - 19', \$7,500
 Field Cultivator - 25' pull-type w/harrow, \$6,700
 Spiketooth harrow 4-section, 24', \$1,070. May be used in same operation as pulled with disc on second-time prior to wheat planting.
 Planter-lister 4R - 36" w/attachments, \$5,350
 Grain drill 13' - 23 shoe, \$5,000, (shared ownership)
 Cultivator 4R 36", \$2,800
 Combine - Base unit 4400 JD or equivalent \$28,450, with 4R - 36" cornhead \$8,500 and 13' small grain platform \$3,400.
 Assume that custom combining will be done in addition to own acreage.
 Grain bin drying or batch dryer-use custom rate for costs.
 Grain auger w/PTO - 8" - 50', \$2,000
 Highboy or aerial spraying - custom hired
 Ground Sprayer - 10R, 3 pt. hitch, w/200 gal. tank, \$830
 Hauling is done by hiring truck with driver or with the use of at least two wagons.
 Swather - 12' pull type, \$7,700 500 acres annual use (custom)
 Baler - 1500# round bale, \$8,400 500 acres annual use (custom)
 Bale mover - 3T cap., \$3,765 500 acres annual use (custom)

ESTIMATED 1980 COSTS PER ACRE, EASTERN NEBRASKA

CORN FOR GRAIN, NON-IRRIGATED

CROPLAND ACRES	500.0	EXPECTED YIELD PER ACRE	85.0
ACRES THIS CROP	250.0	ANIMAL UNITS OF GRAZING	2.5

JOB	ACRES/ HOUR	PURCHASED INPUTS		MACHINE COSTS		
		AMOUNT	VALUE	VARIABLE	FIXED	TOTAL
CHISEL	6.11			2.26	2.42	4.68
ANHYDROUS APPLICATOR	6.87			1.30	1.06	2.36
(MACHINE RENTED, TRACTOR OWNED)						
APPLICATOR RENT		1.00	1.25			1.25
NITROGEN - NH ₃		100.00	12.00			12.00
TANDEM DISC	9.62			1.31	2.03	3.35
FIELD CULTIVATOR	10.18			2.22	3.71	5.92
PLANTER (FERT., HERB., ETC)	3.96			2.37	2.99	5.35
SEED, SINGLE X		0.23	12.65			12.65
PHOS. STRTR		20.00	5.00			5.00
INSECTICIDE		1.00	8.00			8.00
HERBICIDE		1.00	6.00			6.00
ROW CROP CULTIVATOR	4.28			1.91	2.10	4.00
ROW CROP CULTIVATOR	4.28			1.91	2.10	4.00
COMBINE, CORN HEAD	2.50			4.60	9.39	13.99
SPRAYER	(CUSTOM OP.)			0.83		0.83
BORER SPRY 1/3 YR		1.00	2.13			2.13
DRIER	(CUSTOM OP.)			10.20		10.20
TRUCK	(CUSTOM OP.)			6.38		6.38
GRAIN AUGER	7.50			0.15	0.85	1.00
CASH COSTS						
PURCHASED INPUTS				47.03		
VARIABLE MACHINERY COSTS				35.42		
INTEREST ON OPERATING EXPENSE				6.08		
(TOT. VARIABLE COSTS X 11.0 % X 0.7 YRS.)						
TOTAL CASH COSTS						88.53
LABOR						
DIRECT LABOR				10.58		
(1.8 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))						
TOTAL CASH COSTS & LABOR						99.11
FIXED COSTS						
FIXED MACHINERY COSTS				26.65		
TAXES ON LAND (\$1100 VALUE/ACRE X 1%)				11.00		
INTEREST ON LAND (\$1100 VALUE/ACRE X 6%)				66.00		
TOTAL FIXED COSTS						103.65
TOTAL COST, EXCEPT OVERHEAD AND MGT.						202.76
OVERHEAD AND MANAGEMENT						
OVERHEAD (TOTAL CASH COSTS X 5%)				4.43		
MANAGEMENT CHARGE				8.50		
(\$ 0.10 X ESTIMATED YIELD)						
TOTAL OVERHEAD AND MANAGEMENT						12.93
TOTAL COST PER ACRE						215.69
TOTAL COST PER UNIT OF PRODUCTION						2.54
(BASED ON ESTIMATED YIELD)						

ESTIMATED 1980 COSTS PER ACRE, EASTERN NEBRASKA

GRAIN SORGHUM, NON-IRRIGATED

CROPLAND ACRES	500.0	EXPECTED YIELD PER ACRE	80.0
ACRES THIS CROP	150.0	ANIMAL UNITS OF GRAZING	2.0

JOB	ACRES/ HOUR	PURCHASED INPUTS		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
TANDEM DISC	9.62			1.31	2.03	3.35
ANHYDROUS APPLICATOR	6.87			1.30	1.06	2.36
(MACHINE RENTED, TRACTOR OWNED)						
APPLICATOR RENT		1.00	1.25			1.25
NITROGEN - NH3		80.00	9.60			9.60
TANDEM DISC	9.62			1.31	2.03	3.35
PLANTER (FERT., HERB., ETC.)	3.96			2.37	2.99	5.35
SEED		5.00	2.50			2.50
ROW CROP CULTIVATOR	4.28			1.91	2.10	4.00
ROW CROP CULTIVATOR	4.28			1.91	2.10	4.00
SPRAYER	11.82			0.61	1.09	1.71
HERBICIDE		1.00	2.50			2.50
COMBINE, GRAIN HEAD	2.92			3.14	6.03	9.17
TRUCK	(CUSTOM OP.)			6.00		6.00
DRIER	(CUSTOM OP.)			4.80		4.80
DRY 1/2 CROP						
GRAIN AUGER	7.50			0.15	0.85	1.00

CASH COSTS

PURCHASED INPUTS	15.85
VARIABLE MACHINERY COSTS	24.80
INTEREST ON OPERATING EXPENSE	2.68
(TOT. VARIABLE COSTS X 11.0 % X 0.6 YRS.)	
TOTAL CASH COSTS	43.33

LABOR

DIRECT LABOR	9.80
(1.6 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	53.13

FIXED COSTS

FIXED MACHINERY COSTS	20.29
TAXES ON LAND (\$1100 VALUE/ACRE X 1%)	11.00
INTEREST ON LAND (\$1100 VALUE/ACRE X 6%)	66.00
TOTAL FIXED COSTS	97.29
TOTAL COST, EXCEPT OVERHEAD AND MGT.	150.42

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	2.17
MANAGEMENT CHARGE	8.00
(\$ 0.10 X ESTIMATED YIELD)	
TOTAL OVERHEAD AND MANAGEMENT	10.17
TOTAL COST PER ACRE	160.58
TOTAL COST PER UNIT OF PRODUCTION	2.01
(BASED ON ESTIMATED YIELD)	

ESTIMATED 1980 COSTS PER ACRE, EASTERN NEBRASKA

SOYBEANS, NON-IRRIGATED

CROPLAND ACRES	500.0	EXPECTED YIELD PER ACRE	35.0
ACRES THIS CROP	125.0	ANIMAL UNITS OF GRAZING	0.0

JOB	ACRES/ HOUR	PURCHASED		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
TANDEM DISC	9.62			1.31	2.03	3.35
TANDEM DISC	9.62			1.31	2.03	3.35
PLANTER (FERT., HERB., ETC)	3.96			2.37	2.99	5.35
SEED		1.00	9.00			9.00
HERBICIDE		1.00	7.50			7.50
INNOCULANT		1.00	0.30			0.30
ROW CROP CULTIVATOR	4.28			1.91	2.10	4.00
ROW CROP CULTIVATOR	4.28			1.91	2.10	4.00
COMBINE, GRAIN HEAD	2.92			3.14	6.03	9.17
ROGUE LABOR		1.00	3.00			3.00
TRUCK (CUSTOM OP.)				2.63		2.63
GRAIN AUGER	12.00			0.07	0.35	0.42

CASH COSTS

PURCHASED INPUTS	19.80
VARIABLE MACHINERY COSTS	14.64
INTEREST ON OPERATING EXPENSE	2.27
(TOT. VARIABLE COSTS X 11.0 % X 0.6 YRS.)	
TOTAL CASH COSTS	36.71

LABOR

DIRECT LABOR	8.12
(1.4 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	44.83

FIXED COSTS

FIXED MACHINERY COSTS	17.63
TAXES ON LAND (\$1100 VALUE/ACRE X 1%)	11.00
INTEREST ON LAND (\$1100 VALUE/ACRE X 6%)	66.00
TOTAL FIXED COSTS	94.63
TOTAL COST, EXCEPT OVERHEAD AND MGT.	139.46

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	1.84
MANAGEMENT CHARGE (\$ 0.30 X ESTIMATED YIELD)	10.50
TOTAL OVERHEAD AND MANAGEMENT	12.34
TOTAL COST PER ACRE	151.79
TOTAL COST PER UNIT OF PRODUCTION (BASED ON ESTIMATED YIELD)	4.34

ESTIMATED 1980 COSTS PER ACRE, EASTERN NEBRASKA

WHEAT, CONTINUOUS

CROPLAND ACRES	500.0	EXPECTED YIELD PER ACRE	45.0
ACRES THIS CROP	50.0	ANIMAL UNITS OF GRAZING	0.0

JOB	ACRES/ HOUR	PURCHASED		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
MOLDBOARD PLOW	2.26			4.62	4.59	9.21
BROADCAST SPREADER	16.20			0.41	0.41	0.82
(MACHINE RENTED, TRACTOR OWNED)						
SPREADER RENT		1.00	1.25			1.25
18-46-0 STRTR		75.00	10.50			10.50
TANDEM DISC	9.62			1.31	2.03	3.35
TANDEM DISC	9.62			1.31	2.03	3.35
SPIKE TOOTH HARROW	*****			0.01	1.33	1.34
GRAIN DRILL	4.22			2.06	3.40	5.46
SEED + TRTMT		1.25	5.62			5.62
BROADCAST SPREADER	16.20			0.41	0.41	0.82
(MACHINE RENTED, TRACTOR OWNED)						
SPREADER RENT		1.00	1.25			1.25
NITROGEN - N04		30.00	6.60			6.60
COMBINE, GRAIN HEAD	2.92			3.14	6.03	9.17
TRUCK	(CUSTOM OP.)			3.38		3.38
GRAIN AUGER	10.00			0.09	0.45	0.54
CASH COSTS						
PURCHASED INPUTS				25.22		
VARIABLE MACHINERY COSTS				16.73		
INTEREST ON OPERATING EXPENSE				3.09		
(TOT. VARIABLE COSTS X 11.0 % X 0.7 YRS.)						
TOTAL CASH COSTS						45.05
LABOR						
DIRECT LABOR				8.72		
(1.5 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))						
TOTAL CASH COSTS & LABOR						53.77
FIXED COSTS						
FIXED MACHINERY COSTS				20.69		
TAXES ON LAND (\$1100 VALUE/ACRE X 1%)				11.00		
INTEREST ON LAND (\$1100 VALUE/ACRE X 6%)				66.00		
TOTAL FIXED COSTS						97.69
TOTAL COST, EXCEPT OVERHEAD AND MGT.						151.46
OVERHEAD AND MANAGEMENT						
OVERHEAD (TOTAL CASH COSTS X 5%)				2.25		
MANAGEMENT CHARGE (\$ 0.15 X ESTIMATED YIELD)				6.75		
TOTAL OVERHEAD AND MANAGEMENT						9.00
TOTAL COST PER ACRE						160.46
TOTAL COST PER UNIT OF PRODUCTION (BASED ON ESTIMATED YIELD)						3.57

ESTIMATED 1980 COSTS PER ACRE, EASTERN NEBRASKA

ALFALFA ESTABLISHMENT, FALL SEEDED

2.7 CROPLAND ACRES 500.0 EXPECTED YIELD PER ACRE 0.0
 0.7 ACRES THIS CROP 25.0 ANIMAL UNITS OF GRAZING 0.0

JOB	ACRES/ HOUR	PURCHASED		MACHINE COSTS		
		AMOUNT	VALUE	VARIABLE	FIXED	TOTAL
TANDEM DISC	9.62			1.31	2.03	3.35
BROADCAST SPREADER	16.20			0.41	0.41	0.82
(MACHINE RENTED, TRACTOR OWNED)						
SPREADER RENT		1.00	1.25			1.25
PHOS - P205		60.00	15.00			15.00
TANDEM DISC	9.62			1.31	2.03	3.35
SPIKE TOOTH HARROW	*****			0.01	0.66	0.67
GRAIN DRILL	4.22			2.06	3.40	5.46
SEED		12.00	27.00			27.00
INNOCULANT		1.00	0.50			0.50
ROLLER OR PACKER	4.36			1.53	4.00	5.53
CASH COSTS						
PURCHASED INPUTS				43.75		
VARIABLE MACHINERY COSTS				6.63		
INTEREST ON OPERATING EXPENSE				2.77		
(TOT. VARIABLE COSTS X 11.0 % X 0.5 YRS.)						
TOTAL CASH COSTS						53.15
LABOR						
DIRECT LABOR				4.42		
(0.7 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))						
TOTAL CASH COSTS & LABOR						57.57
FIXED COSTS						
FIXED MACHINERY COSTS				12.54		
TAXES ON LAND (\$ 0 VALUE/ACRE X 1%)				0.0		
INTEREST ON LAND (\$ 0 VALUE/ACRE X 6%)				0.0		
TOTAL FIXED COSTS						12.54
TOTAL COST, EXCEPT OVERHEAD AND MGT.						70.11
OVERHEAD AND MANAGEMENT						
OVERHEAD (TOTAL CASH COSTS X 5%)				2.66		
MANAGEMENT CHARGE (\$ 2.00 X ESTIMATED YIELD)				0.0		
TOTAL OVERHEAD AND MANAGEMENT						2.66
TOTAL COST PER ACRE						72.77

ESTIMATED 1980 COSTS PER ACRE, EASTERN NEBRASKA

ALFALFA HAY, LARGE ROUND BALER

CROPLAND ACRES	500.0	EXPECTED YIELD PER ACRE	3.5
ACRES THIS CROP	25.0	ANIMAL UNITS OF GRAZING	0.0

JOB	ACRES/ HOUR	PURCHASED INPUTS		MACHINE COSTS		
		AMOUNT	VALUE	VARIABLE	FIXED	TOTAL
BROADCAST SPREADER	16.20			0.41	0.41	0.82
(MACHINE RENTED, TRACTOR OWNED)						
SPREADER RENT		1.00	1.25			1.25
PHOS. - P205		20.00	5.00			5.00
WINDROWER	3.05			2.86	4.28	7.14
BALER, GIANT	6.77			1.48	3.27	4.75
TWINE		1.50	0.18			0.18
BALE LOADER	18.04			0.59	1.39	1.99
WINDROWER	3.05			2.86	4.28	7.14
BALER, GIANT	6.77			1.48	3.27	4.75
TWINE		1.50	0.18			0.18
BALE LOADER	18.04			0.59	1.39	1.99
WINDROWER	3.05			2.86	4.28	7.14
BALER, GIANT	6.77			1.48	3.27	4.75
TWINE		1.50	0.18			0.18
BALE LOADER	18.04			0.59	1.39	1.99

CASH COSTS

PURCHASED INPUTS	6.79
VARIABLE MACHINERY COSTS	15.19
INTEREST ON OPERATING EXPENSE	2.42
(TOT. VARIABLE COSTS X 11.0 % X 1.0 YRS.)	
TOTAL CASH COSTS	24.40

LABOR

DIRECT LABOR	9.92
(1.7 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	34.32

SHARE OF SEEDING COSTS

18.19

FIXED COSTS

FIXED MACHINERY COSTS	27.27
TAXES ON LAND (\$1100 VALUE/ACRE X 1%)	11.00
INTEREST ON LAND (\$1100 VALUE/ACRE X 6%)	66.00
TOTAL FIXED COSTS	122.46
TOTAL COST, EXCEPT OVERHEAD AND MGT.	156.77

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	1.22
MANAGEMENT CHARGE	7.00
(\$ 2.00 X ESTIMATED YIELD)	
TOTAL OVERHEAD AND MANAGEMENT	8.22
TOTAL COST PER ACRE	164.99
TOTAL COST PER UNIT OF PRODUCTION	47.14
(BASED ON ESTIMATED YIELD)	

ESTIMATED 1980 COSTS PER ACRE, EASTERN NEBRASKA

ALFALFA HAY, FIELD STACKER

CROPLAND ACRES	500.0	EXPECTED YIELD PER ACRE	3.5
ACRES THIS CROP	25.0	ANIMAL UNITS OF GRAZING	0.0

JOB	ACRES/ HOUR	PURCHASED INPUTS		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
BROADCAST SPREADER	16.20			0.41	0.41	0.82
(MACHINE RENTED, TRACTOR OWNED)						
SPREADER RENT		1.00	1.25			1.25
PHOS. - P205		20.00	5.00			5.00
WINDROWER	3.05			2.86	4.28	7.14
WINDROWER	3.05			2.86	4.28	7.14
WINDROWER	3.05			2.86	4.28	7.14
FIELD LOAF STACKER 3T	(CUSTOM OP.)			10.20		10.20
FIELD LOAF STACKER 3T	(CUSTOM OP.)			10.20		10.20
FIELD LOAF STACKER 3T	(CUSTOM OP.)			10.20		10.20
CASH COSTS						
PURCHASED INPUTS				6.25		
VARIABLE MACHINERY COSTS				39.58		
INTEREST ON OPERATING EXPENSE				5.04		
(TOT. VARIABLE COSTS X 11.0 % X 1.0 YRS.)						
TOTAL CASH COSTS						50.87
LABOR						
DIRECT LABOR				6.26		
(1.0 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))						
TOTAL CASH COSTS & LABOR						57.13
SHARE OF SEEDING COSTS				18.19		
FIXED COSTS						
FIXED MACHINERY COSTS				13.26		
TAXES ON LAND (\$1100 VALUE/ACRE X 1%)				11.00		
INTEREST ON LAND (\$1100 VALUE/ACRE X 6%)				66.00		
TOTAL FIXED COSTS						108.45
TOTAL COST, EXCEPT OVERHEAD AND MGT.						165.58
OVERHEAD AND MANAGEMENT						
OVERHEAD (TOTAL CASH COSTS X 5%)				2.54		
MANAGEMENT CHARGE				7.00		
(\$ 2.00 X ESTIMATED YIELD)						
TOTAL OVERHEAD AND MANAGEMENT						9.54
TOTAL COST PER ACRE						175.13
TOTAL COST PER UNIT OF PRODUCTION						50.04
(BASED ON ESTIMATED YIELD)						

ESTIMATED 1980 COSTS PER ACRE, EASTERN NEBRASKA

ALFALFA HAY, CONVENTIONAL BALER, CUSTOM HIRE

CROPLAND ACRES	500.0	EXPECTED YIELD PER ACRE	3.5
ACRES THIS CROP	25.0	ANIMAL UNITS OF GRAZING	0.0

JOB	ACRES/ HOUR	PURCHASED		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
BROADCAST SPREADER	16.20			0.41	0.41	0.82
(MACHINE RENTED, TRACTOR OWNED)						
SPREADER RENT		1.00	1.25			1.25
PHOS. - P205		20.00	5.00			5.00
WINDROWER	(CUSTOM OP.)			6.25		6.25
BALER, REGULAR	(CUSTOM OP.)			11.67		11.67
BALE LOADER	(CUSTOM OP.)			7.14		7.14
WINDROWER	(CUSTOM OP.)			6.25		6.25
BALER, REGULAR	(CUSTOM OP.)			11.67		11.67
BALE LOADER	(CUSTOM OP.)			7.14		7.14
WINDROWER	(CUSTOM OP.)			6.25		6.25
BALER, REGULAR	(CUSTOM OP.)			11.67		11.67
BALE LOADER	(CUSTOM OP.)			7.14		7.14
CASH COSTS						
PURCHASED INPUTS				6.25		
VARIABLE MACHINERY COSTS				75.59		
INTEREST ON OPERATING EXPENSE				9.00		
(TOT. VARIABLE COSTS X 11.0 % X 1.0 YRS.)						
TOTAL CASH COSTS						90.84
LABOR						
DIRECT LABOR				0.37		
(0.1 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))						
TOTAL CASH COSTS & LABOR						91.21
SHARE OF SEEDING COSTS				18.19		
FIXED COSTS						
FIXED MACHINERY COSTS				0.41		
TAXES ON LAND (\$1100 VALUE/ACRE X 1%)				11.00		
INTEREST ON LAND (\$1100 VALUE/ACRE X 6%)				66.00		
TOTAL FIXED COSTS						95.60
TOTAL COST, EXCEPT OVERHEAD AND MGT.						186.81
OVERHEAD AND MANAGEMENT						
OVERHEAD (TOTAL CASH COSTS X 5%)				4.54		
MANAGEMENT CHARGE				7.00		
(\$ 2.00 X ESTIMATED YIELD)						
TOTAL OVERHEAD AND MANAGEMENT						11.54
TOTAL COST PER ACRE						198.36
TOTAL COST PER UNIT OF PRODUCTION						56.67
(BASED ON ESTIMATED YIELD)						

DESCRIPTION OF SOUTHEAST NEBRASKA BENCHMARK FARM

Most farms in this area have only 3-4 crop enterprises depending on soils, acquired machinery, grain or feed storage, livestock program, labor available or off farm interests. The acreage listed is typical for those who produce that crop. One hundred and thirty-three acres of irrigated corn by center-pivot would replace the acres of grain sorghum or wheat.

The soils in this region are flat to rolling hills of Loess and Shale parent materials, consisting of Crete, Fillmore, Wymore, and Pawnee soil associations.

Labor is usually supplied by operator and family. Some seasonal hired labor may be required such as hauling grain either by truck or wagons from fields.

Some tillage field work (disc 1 x or chisel) expects to be done in fall after last crop is harvested in preparation for following year crop.

Typical Farm - Total Acres 600

Grain Sorghum	350	Alfalfa	20
Wheat	150	Forage Sorghum	20
Oats	40	Farmstead, Roads	
Soybeans	60	& Waterways	15

Machinery Inventory and Practices

Tractor #1 - 135-140 hp diesel w/cab \$35,350

Tractor #2 - 100 hp diesel w/cab \$29,746

Tractor #3 - 30-50 hp quite used, for loader & PTO use only

Tandem disc - 21', \$8,000

Plow 5-16", \$4,000

Anhydrous ammonia applicator - 21', 3 pt. mounted, 7 shanks, \$3,196,
Tank rented from fertilizer supplier.

Dry fertilizer spreader rented from supplier.

Field cultivator - 22' pull-type w/harrow & lift cyl. \$6,965

Spiketooth harrow - 24' 4-section, \$1,070

Planter - 6R, 30" w/furrow openers \$6,750

Field Sprayer - 10R, 30' boom, mounted, w/200 gal. tank, \$829

Cultivator - 6R, 30", \$2,900

Grain drill - 10.5', 7" 18 hole, \$5,000

Combine - Base unit, 6620 JD diesel or equiv. w/cab & a/C \$49,000,

13' Grain Head w/pickup reel, \$4,600, and 6R - 30" cornhead, \$11,000.

Assumes that some custom work will be done in addition to own acreage.

Truck - hauling charge will be custom rates @ .075 per bu.
for use of truck and driver.

Grain dryer - custom rates will be used @ .06 per bushel with
assumption that 50% of grain will be field dried.

Forage harvester - Field chopper and hauling of silage will be charged
at prevailing custom rates.

ESTIMATED 1980 COSTS PER ACRE, SOUTHEAST NEBRASKA

CORN FOR GRAIN, CENTER PIVOT IRRIGATED, ELECTRIC

CROPLAND ACRES	600.0	EXPECTED YIELD PER ACRE	130.0
ACRES THIS CROP	132.0	ANIMAL UNITS OF GRAZING	3.0

JOB	ACRES/ HOUR	PURCHASED INPUTS		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
TANDEM DISC	10.63			1.29	2.19	3.48
ANHYDROUS APPLICATOR	6.87			1.55	2.07	3.62
NITROGEN - NH3		150.00	18.00			18.00
TANDEM DISC	10.63			1.29	2.19	3.48
FIELD CULTIVATOR	8.96			1.97	2.97	4.94
PLANTER (FERT., HERB., ETC)	4.95			2.83	3.79	6.61
SEED, SINGLE X		0.30	16.50			16.50
18-46-0 STRTR		30.00	4.20			4.20
INSECTICIDE		1.00	8.00			8.00
HERBICIDE		1.00	6.00			6.00
ROW CROP CULTIVATOR	5.35			2.14	2.35	4.48
COMBINE, CORN HEAD	3.13			5.39	12.66	18.05
SPRAYER	(CUSTOM OP.)			0.83		0.83
BORER SPRY 1/3 YR		0.33	2.11			2.11
TRUCK	(CUSTOM OP.)			9.75		9.75
IRRIGATE 9 IN.	3.75			36.20	53.38	89.58
GRAIN AUGER	5.00			0.26	1.30	1.56

CASH COSTS

PURCHASED INPUTS	54.81
VARIABLE MACHINERY COSTS	63.49
INTEREST ON OPERATING EXPENSE	8.72
(TOT. VARIABLE COSTS X 11.0 % X 0.7 YRS.)	
TOTAL CASH COSTS	127.02

LABOR

DIRECT LABOR	9.72
(1.6 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	136.74

FIXED COSTS

FIXED MACHINERY COSTS	82.90
TAXES ON LAND (\$1000 VALUE/ACRE X 1%)	10.00
INTEREST ON LAND (\$1000 VALUE/ACRE X 6%)	60.00
TOTAL FIXED COSTS	152.90
TOTAL COST, EXCEPT OVERHEAD AND MGT.	289.64

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	6.35
MANAGEMENT CHARGE	13.00
(\$ 0.10 X ESTIMATED YIELD)	
TOTAL OVERHEAD AND MANAGEMENT	19.35
TOTAL COST PER ACRE	308.99
TOTAL COST PER UNIT OF PRODUCTION	2.38
(BASED ON ESTIMATED YIELD)	

ESTIMATED 1980 COSTS PER ACRE, SOUTHEAST NEBRASKA

SILAGE FROM IRRIGATED CORN

CROPLAND ACRES	600.0	EXPECTED YIELD PER ACRE	20.0
ACRES THIS CROP	30.0	ANIMAL UNITS OF GRAZING	0.0

JOB	ACRES/ HOUR	PURCHASED INPUTS		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
TANDEM DISC	10.63			1.29	2.19	3.48
ANHYDROUS APPLICATOR	6.87			1.55	2.07	3.62
NITROGEN - NH3		150.00	18.00			18.00
TANDEM DISC	10.63			1.29	2.19	3.48
FIELD CULTIVATOR	8.96			1.95	2.94	4.90
PLANTER (FERT., HERB., ETC)	4.95			2.83	3.79	6.61
SEED, SINGLE X		0.30	16.50			16.50
18-46-0 STRTR		30.00	4.20			4.20
INSECTICIDE		1.00	8.00			8.00
HERBICIDE		1.00	6.00			6.00
ROW CROP CULTIVATOR	5.35			2.14	2.35	4.48
FORAGE CHOPPER	(CUSTOM OP.)			25.00		25.00
HAULING		20.00	8.00			8.00
IRRIGATE 9 IN.	3.75			36.20	53.38	89.58
SILAGE BLOWER	3.00			3.15	1.08	4.23

CASH COSTS

PURCHASED INPUTS	60.70
VARIABLE MACHINERY COSTS	75.39
INTEREST ON OPERATING EXPENSE	7.49
(TOT. VARIABLE COSTS X 11.0 % X 0.5 YRS.)	
TOTAL CASH COSTS	143.58

LABOR

DIRECT LABOR	8.60
(1.4 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	152.18

FIXED COSTS

FIXED MACHINERY COSTS	69.98
TAXES ON LAND (\$1000 VALUE/ACRE X 1%)	10.00
INTEREST ON LAND (\$1000 VALUE/ACRE X 6%)	60.00
TOTAL FIXED COSTS	139.98
TOTAL COST, EXCEPT OVERHEAD AND MGT.	292.17

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	7.18
MANAGEMENT CHARGE	40.00
(\$ 2.00 X ESTIMATED YIELD)	
TOTAL OVERHEAD AND MANAGEMENT	47.18
TOTAL COST PER ACRE	339.34
TOTAL COST PER UNIT OF PRODUCTION	16.97
(BASED ON ESTIMATED YIELD)	

ESTIMATED 1980 COSTS PER ACRE, SOUTHEAST NEBRASKA

CORN FOR GRAIN, NON-IRRIGATED

CROPLAND ACRES	600.0	EXPECTED YIELD PER ACRE	85.0
ACRES THIS CROP	100.0	ANIMAL UNITS OF GRAZING	3.0

JOB	ACRES/ HOUR	PURCHASED INPUTS		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
TANDEM DISC	10.63			1.29	2.19	3.48
ANHYDROUS APPLICATOR	6.87			1.55	2.07	3.62
NITROGEN - NH3		100.00	12.00			12.00
TANDEM DISC	10.63			1.29	2.19	3.48
FIELD CULTIVATOR	8.96			1.97	2.97	4.94
PLANTER (FERT., HERB., ETC)	4.95			2.83	3.79	6.61
SEED, 3X		0.17	8.50			8.50
18-46-0 STRTR		30.00	4.20			4.20
INSECTICIDE		1.00	8.00			8.00
HERBICIDE		1.00	6.00			6.00
ROW CROP CULTIVATOR	5.35			2.14	2.35	4.48
SPRAYER	11.82			0.69	0.82	1.51
BANVEL		1.00	4.00			4.00
COMBINE, CORN HEAD	(CUSTOM OP.)			16.25		16.25
TRUCK	(CUSTOM OP.)			6.38		6.38
GRAIN AUGER	7.50			0.17	1.70	1.87

CASH COSTS

PURCHASED INPUTS	42.70
VARIABLE MACHINERY COSTS	34.55
INTEREST ON OPERATING EXPENSE	5.69
(TOT. VARIABLE COSTS X 11.0 % X 0.7 YRS.)	
TOTAL CASH COSTS	82.94

LABOR

DIRECT LABOR	6.31
(1.1 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	89.25

FIXED COSTS

FIXED MACHINERY COSTS	18.08
TAXES ON LAND (\$1000 VALUE/ACRE X 1%)	10.00
INTEREST ON LAND (\$1000 VALUE/ACRE X 6%)	60.00
TOTAL FIXED COSTS	88.08
TOTAL COST, EXCEPT OVERHEAD AND MGT.	177.33

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	4.15
MANAGEMENT CHARGE (\$ 0.10 X ESTIMATED YIELD)	8.50
TOTAL OVERHEAD AND MANAGEMENT	12.65
TOTAL COST PER ACRE	189.97
TOTAL COST PER UNIT OF PRODUCTION (BASED ON ESTIMATED YIELD)	2.23

ESTIMATED 1980 COSTS PER ACRE, SOUTHEAST NEBRASKA

GRAIN SORGHUM, NON-IRRIGATED

CROPLAND ACRES	600.0	EXPECTED YIELD PER ACRE	70.0
ACRES THIS CROP	350.0	ANIMAL UNITS OF GRAZING	2.0

JOB	ACRES/ HOUR	PURCHASED INPUTS		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
TANDEM DISC	10.63			1.29	2.19	3.48
ANHYDROUS APPLICATOR	6.87			1.55	2.07	3.62
NITROGEN - NH3		80.00	9.60			9.60
TANDEM DISC	10.63			1.29	2.19	3.48
FIELD CULTIVATOR	8.96			1.97	2.97	4.94
PLANTER (FERT., HERB., ETC)	4.95			2.83	3.79	6.61
SEED		5.00	2.50			2.50
HERBICIDE		1.00	6.00			6.00
SPRAYER	11.82			0.69	0.82	1.51
2,4-D		1.00	1.50			1.50
ROW CROP CULTIVATOR	5.35			2.14	2.35	4.48
COMBINE, GRAIN HEAD	3.38			3.70	8.24	11.94
TRUCK	(CUSTOM OP.)			5.25		5.25
GRAIN AUGER	10.00			0.14	0.70	0.84
DRY 1/2 CROP	20.00			1.40	2.80	4.20

CASH COSTS

PURCHASED INPUTS	19.60
VARIABLE MACHINERY COSTS	22.24
INTEREST ON OPERATING EXPENSE	2.76
(TOT. VARIABLE COSTS X 11.0 % X 0.6 YRS.)	
TOTAL CASH COSTS	44.60

LABOR

DIRECT LABOR	8.19
(1.4 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	52.79

FIXED COSTS

FIXED MACHINERY COSTS	28.11
TAXES ON LAND (\$1000 VALUE/ACRE X 1%)	10.00
INTEREST ON LAND (\$1000 VALUE/ACRE X 6%)	60.00
TOTAL FIXED COSTS	98.11
TOTAL COST, EXCEPT OVERHEAD AND MGT.	150.90

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	2.23
MANAGEMENT CHARGE	7.00
(\$ 0.10 X ESTIMATED YIELD)	
TOTAL OVERHEAD AND MANAGEMENT	9.23
TOTAL COST PER ACRE	160.13
TOTAL COST PER UNIT OF PRODUCTION	2.29
(BASED ON ESTIMATED YIELD)	

ESTIMATED 1980 COSTS PER ACRE, SOUTHEAST NEBRASKA

SILAGE FROM DRYLAND FORAGE SORGHUM

CROPLAND ACRES	600.0	EXPECTED YIELD PER ACRE	14.0
ACRES THIS CROP	30.0	ANIMAL UNITS OF GRAZING	0.0

JOB	ACRES/ HOUR	PURCHASED		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
TANDEM DISC	10.63			1.29	2.19	3.48
ANHYDROUS APPLICATOR	6.87			1.55	2.07	3.62
NITROGEN - NH ₃		80.00	9.60			9.60
TANDEM DISC	10.63			1.29	2.19	3.48
FIELD CULTIVATOR	8.15			2.07	3.05	5.12
PLANTER (FERT., HERB., ETC)	4.95			2.83	3.79	6.61
SEED		5.00	2.50			2.50
HERBICIDE		1.00	6.00			6.00
ROW CROP CULTIVATOR	5.35			2.14	2.35	4.48
FORAGE CHOPPER	(CUSTOM OP.)			20.00		20.00
HAULING		14.00	5.60			5.60
SILAGE BLOWER	4.29			2.21	0.76	2.97
CASH COSTS						
PURCHASED INPUTS				23.70		
VARIABLE MACHINERY COSTS				33.36		
INTEREST ON OPERATING EXPENSE				3.14		
(TOT. VARIABLE COSTS X 11.0 % X 0.5 YRS.)						
TOTAL CASH COSTS						60.20
LABOR						
DIRECT LABOR				6.47		
(1.1 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))						
TOTAL CASH COSTS & LABOR						66.67
FIXED COSTS						
FIXED MACHINERY COSTS				16.39		
TAXES ON LAND (\$1000 VALUE/ACRE X 1%)				10.00		
INTEREST ON LAND (\$1000 VALUE/ACRE X 6%)				60.00		
TOTAL FIXED COSTS						86.39
TOTAL COST, EXCEPT OVERHEAD AND MGT.						153.06
OVERHEAD AND MANAGEMENT						
OVERHEAD (TOTAL CASH COSTS X 5%)				3.01		
MANAGEMENT CHARGE				28.00		
(\$ 2.00 X ESTIMATED YIELD)						
TOTAL OVERHEAD AND MANAGEMENT						31.01
TOTAL COST PER ACRE						184.07
TOTAL COST PER UNIT OF PRODUCTION						13.15
(BASED ON ESTIMATED YIELD)						

ESTIMATED 1980 COSTS PER ACRE, SOUTHEAST NEBRASKA

SOYBEANS, NON-IRRIGATED

CROPLAND ACRES	600.0	EXPECTED YIELD PER ACRE	30.0
ACRES THIS CROP	50.0	ANIMAL UNITS OF GRAZING	0.0

JOB	ACRES/ HOUR	PURCHASED INPUTS		MACHINE COSTS		
		AMOUNT	VALUE	VARIABLE	FIXED	TOTAL
TANDEM DISC	10.63			1.29	2.19	3.48
TANDEM DISC	10.63			1.29	2.19	3.48
FIELD CULTIVATOR	8.15			2.07	3.05	5.12
PLANTER (FERT., HERB., ETC)	4.95			2.83	3.79	6.61
SEED		1.00	9.00			9.00
INNOCULANT		1.00	0.30			0.30
SPRAYER	11.82			0.69	0.82	1.51
HERBICIDE		1.00	15.00			15.00
ROW CROP CULTIVATOR	5.35			2.14	2.35	4.48
COMBINE, GRAIN HEAD	3.38			3.70	8.24	11.94
TRUCK	(CUSTOM OP.)			2.25		2.25
ROGUE LABOR		1.00	3.00			3.00
GRAIN AUGER	12.00			0.06	0.30	0.36

CASH COSTS

PURCHASED INPUTS	27.30
VARIABLE MACHINERY COSTS	16.31
INTEREST ON OPERATING EXPENSE	2.88
(TOT. VARIABLE COSTS X 11.0 % X 0.6 YRS.)	
TOTAL CASH COSTS	46.49

LABOR

DIRECT LABOR	6.98
(1.2 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	53.47

FIXED COSTS

FIXED MACHINERY COSTS	22.92
TAXES ON LAND (\$1000 VALUE/ACRE X 1%)	10.00
INTEREST ON LAND (\$1000 VALUE/ACRE X 6%)	60.00
TOTAL FIXED COSTS	92.92
TOTAL COST, EXCEPT OVERHEAD AND MGT.	146.39

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	2.32
MANAGEMENT CHARGE	9.00
(\$ 0.30 X ESTIMATED YIELD)	
TOTAL OVERHEAD AND MANAGEMENT	11.32
TOTAL COST PER ACRE	157.72
TOTAL COST PER UNIT OF PRODUCTION	5.26
(BASED ON ESTIMATED YIELD)	

ESTIMATED 1980 COSTS PER ACRE, SOUTHEAST NEBRASKA

WHEAT, CONTINUOUS

CROPLAND ACRES	600.0	EXPECTED YIELD PER ACRE	35.0
ACRES THIS CROP	150.0	ANIMAL UNITS OF GRAZING	0.0

JOB	ACRES/ HOUR	PURCHASED INPUTS		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
MOLDBOARD PLOW	2.60			4.25	4.41	8.65
TANDEM DISC	10.63			1.29	2.19	3.48
FIELD CULTIVATOR	8.15			2.07	3.05	5.12
BROADCAST SPREADER	16.20			0.49	0.46	0.94
(MACHINE RENTED, TRACTOR OWNED)						
SPREADER RENT		1.00	1.25			1.25
18-46-0		70.00	9.80			9.80
GRAIN DRILL	3.69			2.60	3.70	6.30
SEED + TRTMT		1.25	5.62			5.62
BROADCAST SPREADER	16.20			0.49	0.46	0.94
(MACHINE RENTED, TRACTOR OWNED)						
SPREADER RENT		1.00	1.25			1.25
NITROGEN - N04		45.00	9.90			9.90
COMBINE, GRAIN HEAD	3.38			3.70	8.24	11.94
TRUCK	(CUSTOM OP.)			2.63		2.63
GRAIN AUGER	10.00			0.07	0.35	0.42
CASH COSTS						
PURCHASED INPUTS				27.82		
VARIABLE MACHINERY COSTS				17.58		
INTEREST ON OPERATING EXPENSE				4.00		
(TOT. VARIABLE COSTS X 11.0 % X 0.8 YRS.)						
TOTAL CASH COSTS						49.40
LABOR						
DIRECT LABOR				8.35		
(1.4 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))						
TOTAL CASH COSTS & LABOR						57.75
FIXED COSTS						
FIXED MACHINERY COSTS				22.84		
TAXES ON LAND (\$1000 VALUE/ACRE X 1%)				10.00		
INTEREST ON LAND (\$1000 VALUE/ACRE X 6%)				60.00		
TOTAL FIXED COSTS						92.84
TOTAL COST, EXCEPT OVERHEAD AND MGT.						150.60
OVERHEAD AND MANAGEMENT						
OVERHEAD (TOTAL CASH COSTS X 5%)				2.47		
MANAGEMENT CHARGE				5.25		
(\$ 0.15 X ESTIMATED YIELD)						
TOTAL OVERHEAD AND MANAGEMENT						7.72
TOTAL COST PER ACRE						158.32
TOTAL COST PER UNIT OF PRODUCTION						4.52
(BASED ON ESTIMATED YIELD)						

ESTIMATED 1980 COSTS PER ACRE, SOUTHEAST NEBRASKA

OATS, NON-IRRIGATED

CROPLAND ACRES	600.0	EXPECTED YIELD PER ACRE	70.0
ACRES THIS CROP	30.0	ANIMAL UNITS OF GRAZING	0.0

JOB	ACRES/ HOUR	PURCHASED		MACHINE COSTS	
		AMOUNT	VALUE	VARIABLE	FIXED TOTAL
TANDEM DISC	10.63			1.29	2.19 3.48
TANDEM DISC	10.63			1.29	2.19 3.48
BROADCAST SPREADER	16.20			0.49	0.46 0.94
(MACHINE RENTED, TRACTOR OWNED)					
SPREADER RENT		1.00	1.25		1.25
50#N, 30#P MXD		1.00	18.50		18.50
FIELD CULTIVATOR	8.15			2.07	3.05 5.12
GRAIN DRILL	3.69			2.60	3.70 6.30
SEED		2.00	4.00		4.00
COMBINE, GRAIN HEAD	3.38			3.70	8.24 11.94
TRUCK	(CUSTOM OP.)			5.25	5.25
	10.00			0.14	0.70 0.84

CASH COSTS

PURCHASED INPUTS	23.75
VARIABLE MACHINERY COSTS	16.83
INTEREST ON OPERATING EXPENSE	1.34
(TOT. VARIABLE COSTS X 11.0 % X 0.3 YRS.)	
TOTAL CASH COSTS	41.92

LABOR

DIRECT LABOR	6.24
(1.0 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))	
TOTAL CASH COSTS & LABOR	48.15

FIXED COSTS

FIXED MACHINERY COSTS	20.52
TAXES ON LAND (\$1000 VALUE/ACRE X 1%)	10.00
INTEREST ON LAND (\$1000 VALUE/ACRE X 6%)	60.00
TOTAL FIXED COSTS	90.52
TOTAL COST, EXCEPT OVERHEAD AND MGT.	138.67

OVERHEAD AND MANAGEMENT

OVERHEAD (TOTAL CASH COSTS X 5%)	2.10
MANAGEMENT CHARGE	5.60
(\$ 0.08 X ESTIMATED YIELD)	
TOTAL OVERHEAD AND MANAGEMENT	7.70
TOTAL COST PER ACRE	146.37
TOTAL COST PER UNIT OF PRODUCTION	2.09
(BASED ON ESTIMATED YIELD)	

ESTIMATED 1980 COSTS PER ACRE, SOUTHEAST NEBRASKA

ALFALFA, LARGE ROUND BALER

CROPLAND ACRES	600.0	EXPECTED YIELD PER ACRE	3.0
ACRES THIS CROP	20.0	ANIMAL UNITS OF GRAZING	0.0

JOB	ACRES/ HOUR	PURCHASED INPUTS		MACHINE COSTS		TOTAL
		AMOUNT	VALUE	VARIABLE	FIXED	
BROADCAST SPREADER	16.20			0.49	0.46	0.94
(MACHINE RENTED, TRACTOR OWNED)						
SPREADER RENT		1.00	1.25			1.25
PHOS. - P205		20.00	5.00			5.00
SELF-PROPELLED WINDROWER	(CUSTOM OP.)			6.00		6.00
BALER, GIANT	(CUSTOM OP.)			8.33		8.33
SELF-PROPELLED WINDROWER	(CUSTOM OP.)			6.00		6.00
BALER, GIANT	(CUSTOM OP.)			8.33		8.33
SELF-PROPELLED WINDROWER	(CUSTOM OP.)			6.00		6.00
BALER, GIANT	(CUSTOM OP.)			8.33		8.33
BALE MOVING	6.00			0.10	0.90	1.00
BALE MOVING	6.00			0.10	0.90	1.00
BALE MOVING	6.00			0.10	0.90	1.00
CASH COSTS						
PURCHASED INPUTS				6.25		
VARIABLE MACHINERY COSTS				43.78		
INTEREST ON OPERATING EXPENSE				5.50		
(TOT. VARIABLE COSTS X 11.0 % X 1.0 YRS.)						
TOTAL CASH COSTS						55.53
LABOR						
DIRECT LABOR				3.37		
(0.6 HRS X \$ 5.00/HR X 1.2 (OVERHEAD))						
TOTAL CASH COSTS & LABOR						58.90
SHARE OF SEEDING COSTS				18.19		
FIXED COSTS						
FIXED MACHINERY COSTS				3.16		
TAXES ON LAND (\$1000 VALUE/ACRE X 1%)				10.00		
INTEREST ON LAND (\$1000 VALUE/ACRE X 6%)				60.00		
TOTAL FIXED COSTS						91.35
TOTAL COST, EXCEPT OVERHEAD AND MGT.						150.25
OVERHEAD AND MANAGEMENT						
OVERHEAD (TOTAL CASH COSTS X 5%)				2.78		
MANAGEMENT CHARGE				6.00		
(\$ 2.00 X ESTIMATED YIELD)						
TOTAL OVERHEAD AND MANAGEMENT						8.78
TOTAL COST PER ACRE						159.02
TOTAL COST PER UNIT OF PRODUCTION						53.01
(BASED ON ESTIMATED YIELD)						

ESTIMATED COSTS OF MAINTAINING DAIRY HERDS^{1/}
 PER COW, EASTERN NEBRASKA
 (60 COWS, INCLUDING REPLACEMENTS, DRYLOT SYSTEM)

Costs		Milk Production Level					
		16,000 lbs/Cow		13,000 lbs/Cow		10,000 lbs/Cow	
		Quantity	Dollars	Quantity	Dollars	Quantity	Dollars
Feed	Concentrate-cows	6,000 lbs	\$360.00	5,000 lbs	\$300.00	4,000 lbs	\$240.00
	hfrs	400 lbs	24.00	400 lbs	24.00	400 lbs	24.00
	Hay equivalent-cows	4.4 Tons	220.00	4.6 Tons	230.00	4.8 Tons	240.00
	hfrs	1.3 Tons	65.00	1.3 Tons	65.00	1.3 Tons	65.00
	Total Feed Costs		\$669.00		\$619.00		\$569.00
Bedding			12.00		12.00		12.00
Milk Hauling @ .56 Cwt			89.60		72.80		56.00
Breeding fees			18.00		14.00		10.00
Fuel & Oil - tractor & mach.			18.59		18.59		18.59
Interest on cattle @ 11%			273.00		221.27		185.35
Interest on feed & operating exp.			65.63		58.55		52.42
DHIA fee & other records			18.00		15.00		15.00
Veterinary & medicine			20.00		20.00		18.00
Utilities			29.00		27.00		25.00
Supplies			22.00		22.00		22.00
Repairs-buildings & equipment			17.90		17.90		17.90
Insurance on cattle @ \$2.50/1,000			6.21		5.03		4.21
Total "cash" costs			\$589.93		\$504.14		\$436.47
Death Loss @ 3%			74.46		60.35		50.55
Labor - 55 Hrs. @ \$5.00			275.00		275.00		275.00
Total feed, "cash" costs, death loss, and labor		1,608.39		1,458.49		13,331.02	
Fixed costs on facilities and equipment			133.23		133.23		133.23
Total costs except overhead and management			\$1,741.62		\$1,591.72		\$1,464.25
Overhead - 5% of cash costs			29.49		25.21		21.82
Management - 4% of total receipts			88.91		73.67		58.43
Total all costs			\$1,860.02		\$1,690.60		\$1,544.50
Credit for sale of:							
.3 cull cows			135.00		135.00		135.00
.06 cull heifers			48.00		42.00		36.00
.53 day-old calves			39.75		39.75		39.75
Net cost of producing milk/cow							
Total			\$1,637.27		\$1,473.85		\$1,333.75
Per cwt.			\$10.23		\$11.33		\$13.34
Net cost of milk production/cwt. when overhead, management, and labor is excluded			\$7.77		\$8.46		\$9.79

^{1/}The basic dairy production costs were obtained from data collected from State and Area Dairy Specialists together with commercial feed companies and dairy producers. Don Kubik, District Dairy Specialist, Northeast Station represented the Nebraska staff.

SHEEP BUDGETING

Basic Assumptions

A listing of the basic assumptions is necessary for understanding how the figures were obtained in order to relate them to any operation. The budgets were first developed on a per head basis, followed by the development of 100 ewe farm flock costs.

The assumptions are as follows:

1. The prices used are shown on the budget sheet.
2. All minor costs were allocated to the ewe.
3. Overhead was charged at 5% of costs.
4. \$2.00 per head was allocated as a management charge.
5. A 2% death charge was allocated to the cost of the ram.
6. The 2% death rate was considered as a loss of revenue when culled ewes were sold.
7. A 20% replacement was assumed.
8. It was assumed that at sale time, cull ewes were sold and the replacement stock went directly into the flock.
9. It was assumed that all replacement ewes would be acceptable and no additional animals would be carried over.
10. Three rams per 100 ewes was assumed.
11. It was assumed that animals would be grazed from May 1st to December 1st, and then would be placed in a dry lot.
12. The average age of the lamb at marketing was 120 days.
13. It was assumed the lamb grazed for 2 months.
14. The ration for the lamb was a pelleted feed consisting of 40% alfalfa, 55% corn, and 5% oats.

SHEEP BUDGET PER HEAD

	COST PER HEAD		
	Ewe	Lamb	Ram
Corn (\$2.50/bu.)			
Ewe .6#/day Jan 15-May 1	\$2.81		
Ram .5#/day Dec 1-May 1			\$3.37
Lamb pellets @ \$126/T			
1.5#/day 110 days		\$10.40	
Alfalfa hay (\$50/T)			
Ewe 3.8#/day Dec 1-Feb 15	7.32		
Ewe 5.2#/day Feb 15-May 1	9.62		
Ram 4#/day Dec 1-May 1			15.10
Breeding charges (includes depreciation & death)			59.40
Other charges			
Shearing	2.50		2.50
Vet. & Drugs	1.50		2.50
Bldg. (repair, impvt., taxes, depr.)	.55		
Equipment (repair, impvt., taxes, depr.)	.86		
Marketing and Transportation	1.50		
Supplies	1.84		
Interest on Variable Costs	2.28	.83	1.88
Interest on Ewe	5.80		
Interest on Ram			11.20
Land charges			
Ewe (0.2 aum, 7 mo., \$11)	15.40		
Ram (0.3 aum, 7 mo., \$11)			23.10
Lambs (0.1 aum, 2 mo., \$11)		2.20	
Interest on land	1.08	.15	1.62
SUBTOTAL	\$53.06	\$13.58	\$87.68
Charge for Overhead	2.65	.68	4.38
Management Charge	2.00		
TOTAL COSTS	\$57.71	\$14.26	\$125.05

COSTS AND BREAK EVEN PRICE FOR 100 EWE OPERATION

AT DIFFERENT PERCENTAGES OF FAT LAMBS SOLD*

	115% Fat Lambs Sold	130% Fat Lambs Sold	145% Fat Lambs Sold	160% Fat Lambs Sold
Non Land Cost				
Ewes	\$3658.00	\$3658.00	\$3658.00	\$3658.00
Lambs	1291.45	1459.90	1628.35	1796.80
Rams	287.85	287.85	278.85	287.85
Subtotal	\$5237.30	\$5405.75	\$5574.20	\$5742.65
Land Costs				
Ewe	\$1648.00	\$1648.00	\$1648.00	\$1648.00
Lamb	270.25	305.50	340.75	376.00
Ram	74.16	74.16	74.16	74.16
Subtotal Land Costs	\$1992.41	\$2027.66	\$2062.91	\$2098.16
Overhead & Management				
Ewes	\$465.00	\$465.00	\$465.00	\$465.00
Lambs	78.20	88.40	98.60	108.00
Rams	13.14	13.14	13.14	13.14
Subtotal Overh. & Mgt.	\$556.34	\$566.54	\$576.74	\$586.14
Total Costs	\$7786.05	\$7999.95	\$8213.85	\$8426.95
Estimated Breakeven Price/Cwt. Lambs**	\$63.00	\$56.00	\$50.00	\$46.00

* 20% Replacement, 2% death loss.

** Breakeven analysis included estimated revenue from the sale of such items as, wool from ewes and rams, culled ewes and rams, etc.

ESTIMATED COSTS - SWINE PRODUCTION

	Sow & 2 Litters to 225#	Sow & 2 Litters to 40#	Feeder Pig 40-225#
Feed			
Corn (\$2.50/bu)	(198 bu) \$495.00	(48 bu) \$120.00	(10 bu) \$25.00
Soybean Meal (\$200/T)	(2312#) 231.20	(640#) 64.00	(111#) 11.10
Vit., Min., Salt, etc.	(541#) 57.35	(132#) 14.00	(27#) 2.85
Baby Pig Feed	(186#) 28.60	(186#) 28.60	---
<u>Total Feed Cost</u>	<u>\$812.15</u>	<u>\$226.60</u>	<u>\$38.95</u>
Feed Cost per Unit Produced	23.54/cwt	15.11/pig	21.05/cwt gain
Buildings and Equipment	251.95	162.85	5.95
Labor (\$5.00/hr)	136.25	87.50	3.25
Depreciation & Death Loss on Breeding Stock	28.00	28.00	---
Veterinary & Medicine	20.90	18.00	.20
Utilities	29.85	18.50	.75
Marketing & Transportation	46.50	2.85	2.90
Interest, 11%	41.40	26.45	1.80
Feed Processing (\$6/T)	42.40	10.95	2.10
Death Loss--Feeder Pigs	12.65	---	.90
Miscellaneous	6.60	2.30	.30
<u>Total Non-feed Cost</u>	<u>\$616.50</u>	<u>\$357.40</u>	<u>\$18.15</u>
Non-feed Cost per Unit Produced	17.86/cwt	23.83/pig	9.81/cwt gain
Cost of Feeder Pig	---	---	<u>27.00</u>
Total Costs, Except Overhead & Management	\$1,428.65	\$584.00	\$84.10
Overhead	25.25	9.30	1.15
Management	<u>67.50</u>	<u>52.50</u>	<u>1.00</u>
Total Costs	\$1,521.40	\$645.80	\$86.25
Total Costs Per Unit	\$44.10/cwt	\$43.05/pig	\$38.33/cwt

EXPLANATION OF ESTIMATED SWINE PRODUCTION COSTS AND RETURNS

1. Feed requirements reflect an average feed conversion rate of 4.1 pounds of feed per pound of hog sold for the farrow-to-finish operation, and 3.8 pounds of feed per pound of gain in the finishing operation.

A 16% protein ration is fed to pigs from 20-60#, and a 14% protein ration is fed from 60-225#.

A feed processing charge of \$6.00/ton is used.

2. Buildings & equipment--

- a. An environment-regulated farrowing house with farrowing crates and slotted floor, used 6 times per year.
- b. An environment-regulated nursery with slotted floor.
- c. A modified-open-front finishing facility, used for 3 batches per year.
- d. Modest sow shelters.

Costs used for these facilities represent something less than 1979-80 turn-key prices, as the average producer probably has a mixture of new and older facilities. Investment costs used in these budgets were:

Farrowing house \$1,600 per sow space; Nursery \$600 per sow unit; Finishing facility \$90 per pig space; and Sow facility \$70 per sow.

3. Labor--Considering the automated facilities, labor requirements of 17.5 hrs. per sow and 2 litters to 40#, and 0.65 hr. per pig for finishing were used.

A trade-off exists between building costs and labor. A producer with modest facilities would no doubt have a significantly higher labor requirement. Thus, the total costs of production here might not be greatly different for different systems of production.

ESTIMATED COSTS PER COW UNIT, BEEF COW HERD,
RANCH AREA 1980, (INCLUDES REPLACEMENTS)

Winter Grazing with Minimum Hay:			
	Quantity	Price	Cost/Cow
Feed:			
Hay (loose in windrow)	0.5 ton	\$25.00	\$12.50
Winter grazing	6 aum's	10.00	60.00
Summer grazing	9 aum's	10.00	90.00
Protein	2.25 cwt	9.60	21.60
Grain (1 hfr/5 cows)	1.6 bu/hfr	2.50	4.00
Salt & mineral			2.25
Feed cost			\$190.35
Other cash costs:			
Vet. & medicine			\$4.50
Marketing	5.6 cwt x 1.20		6.72
Cash cost bldgs. & equip.			1.75
Int. on animals (ave. value over life)	\$650. x .11		71.50
Int. on feed	\$190. x .11 x .5 yr		10.45
Misc. cash costs			5.75
Cash cost other than feed			\$100.67
Depreciation on bull (\$1,500 - 840) ÷ 80 cows bred			8.25
Death loss	\$650. x .01		6.50
Labor	5.25 hrs. x \$5.00		26.25
Total: Feed, cash, depr., death loss, labor			\$332.02
Fixed costs bldg. & equip.			5.00
Overhead			1.75
Management			12.00
Total: All costs			\$350.77
Credits:			
Cull cow sales	.16/cow x 950# x \$.50	\$76.00	
Cull heifer	.04/cow x 700# x .70	19.60	
Cull bull	.015 x 1400# x .60	12.60	
Total credits:			108.20
Net cost/cow unit			\$242.57

Calves weaned/cow	80%	85%	90%	95%
Net cost/calf produces	\$303.21	\$285.38	\$269.52	\$255.34
Net cost/calf sold	404.28	373.18	346.53	323.43
Ave. wt./ calf sold	Net cost/cwt. calf sold			
350	115.51	106.62	99.01	92.41
400	101.07	93.29	86.63	80.86
450	89.84	82.93	77.01	71.87
500	80.86	74.64	69.31	64.68
550	73.51	67.85	63.01	58.81
600	67.38	62.20	57.75	53.90

For each 100 cows: 16 replaced annually, 20 heifer calves retained, 4 cull heifers sold, 1 bull per 20 cows, 7.5 aum's of winter forage/cow unit and 9.0 aum's of summer forage, 650 lbs. of hay = 1 aum.

ESTIMATED COSTS PER COW UNIT, BEEF COW HERD,
RANCH AREA 1980, (INCLUDES REPLACEMENTS)

Winter Haying & Aftergrowth Grazing:

	Quantity	Price	Cost
Feed:			
Hay (stacked)	1.8 ton	\$35.00	\$63.00
Winter grazing	2 aum's	10.00	20.00
Summer grazing	9 aum's	10.00	90.00
Protein	1 cwt	9.60	9.60
Grain (1 hfr/15 cows)	1.6 bu	2.50	4.00
Salt & mineral			2.25
Feed cost			<u>\$188.85</u>

Other cash costs:

Vet. & medicine		\$4.50
Marketing	5.6 cwt x 1.20	6.72
Cash costs bldgs. & equip.		4.00
Int. on animals (ave. value)	\$650. x .11	71.50
Int. on feed	\$188.85 (.5 yr) x .11	10.39
Misc. cash costs		5.75
Cash costs other than feed		<u>\$102.86</u>

Depreciation on bull (\$1500 - 840) ÷ 80 breedings		\$8.25
Death loss	\$650. x .01	6.50
Labor	6 hrs x \$5.00	<u>30.00</u>

Total: Feed, cash, depr., death loss and labor	\$336.46
Fixed costs bldgs. & equip.	6.50
Overhead	1.75
Management	<u>12.00</u>

Total: All costs	\$356.71
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Credits:

Cull cow	.16 cow x 950# x \$.50	\$76.00
cull heifer	.04 hfr x 700# x .70	19.60
cull bull	.015 bull x 1400 x .60	12.60

Total Credits:	<u>108.20</u>
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Net cost/cow unit	\$248.51
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Calves weaned/cow	80%	85%	90%	95%
Net cost/calf produced	\$310.64	\$292.36	\$276.12	\$261.59
Net cost/calf sold	414.18	382.32	355.01	331.35
	Net cost/cwt. of calf sold			
wean. wt.				
350	118.34	109.23	101.43	94.67
400	103.54	95.58	88.75	82.84
450	92.04	84.96	78.89	73.63
500	82.83	76.46	71.00	66.27
550	75.31	69.51	64.55	60.25
600	69.03	63.72	59.17	55.22

For each 100 cows: 16 replaced annually, 20 heifer calves retained, 4 cull heifers sold, 1 bull per 20 cows, 7.5 aum's of winter forage/cow unit and 9.0 aum's of summer forage, 650 lbs. of hay = 1 aum.

ESTIMATED COSTS PER COW UNIT, BEEF COW HERD
FARMING AREA 1980 (INCLUDES REPLACEMENTS)

Wintered on Corn Stalks and Alfalfa Hay

	Quantity	Price	Cost/cow
Feed:			
Alfalfa hay (big bale)	1.35 ton	\$45.00	\$60.75
Stalk pasture	90 days	.18/day	16.20
Summer pasture	9 aum's	10.00	90.00
Grain for heifer (1 hfr/5 cows)	1.6 bu.	2.50	4.00
Salt & mineral			2.25
Feed cost			<u>\$173.20</u>

Other cash costs:

Vet. & medicine		\$6.00
Marketing	5.6 cwt x 1.20	6.72
Cash costs on bldgs. & equip		5.00
Int. on animals	\$650. x .11	71.50
Int. on feed	173. (½ year) x 0.11	9.52
Misc. cash costs		5.75
Cash costs other than feed		<u>\$104.49</u>

Depreciation, bull (1500 - 840) ÷ 80 cows bred		8.25
Death loss	\$650. x .01	6.50
Labor	8 hrs. x \$5.00	<u>40.00</u>

Total: Feed, cash, depr., death & labor		\$332.44
Fixed costs bldg. & equip.		10.50
Overhead		1.75
Management		<u>12.00</u>

Total: All costs		\$356.69
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Credits:		
cull cow 0.16 x 950 lbs. x \$.50	76.00	
cull heifers 0.14 x 700 lbs. x .70	19.60	
cull bull 0.015 x 1400 lbs. x .60	12.60	
Total credits		<u>108.20</u>

Net cost/cow unit		\$248.49
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Calves Weaned/Cow	80%	85%	90%	95%
Net cost/calf produced	\$310.60	\$292.34	\$276.10	\$261.57
Net cost/calf sold	414.15	382.29	354.99	331.32
	Net cost/cwt. calf sold			
wean wt.				
350	118.33	109.23	101.43	94.66
400	103.54	95.57	88.75	82.83
450	92.03	84.95	78.89	73.63
500	82.83	76.46	71.00	66.26
550	75.30	69.51	64.54	60.24
600	69.02	63.71	59.16	55.22

For each 100 cows: 16 replaced annually, 20 heifer calves retained, 1 bull per 25 cows, 7.5 aum's of forage for winter, 9.0 aum's of forage for summer, 650 lbs. of hay = 1 aum.

ESTIMATED COSTS PER COW UNIT, BEEF COW HERD
FARMING AREA 1980 (INCLUDES REPLACEMENTS)

Wintered on Stalks , Stalklage, Supp., Corn:

	Quantity	Price	Cost/cow
Feed:			
Stalklage	1.9 ton	\$18.00	\$34.20
Stalk pasture	90 days	.18	16.20
Protein 1.2 aum's x 90 days x 1.25/day x .095			12.82
Grain for heifer	1.6 bu.	2.50	4.00
Grain for cow .84 au x 6.4 bu./cow		2.50	13.44
Summer grazing	9 aum	10.00	90.00
Salt & mineral			2.25
Feed cost			\$172.91

Other cash costs:

Vet. & medicine		\$6.00
Marketing	5.6 cwt x 1.20	6.72
Cash costs bldg. & equip.		5.00
Int. on ave. cow in herd	\$650. x 0.11	71.50
Int. on feed cost	173. (½ yr) x .011	9.52
Misc. cash costs		5.75
Cash costs other than feed		\$104.49

Depreciation (1500 - 840) ÷ 80 cows bred

8.25

Death loss

\$650. x .01

6.50

Labor

7.25 x \$5.00

36.25

Total: Feed, cash, depr., death, labor

\$328.40

Fixed cost, bldg. & equip.

10.50

Overhead

1.75

Management

12.00

Total: All costs

\$352.65

Credits:

Cull cow 0.16 cow x 950 lbs. x \$0.50 \$76.00

Cull heifer 0.04 cow x 700 lbs. x 0.70 19.60

Cull bull 0.015 cow x 1400 lbs. x .60 12.60

Total credits:

108.20

Net cost/cow unit

\$244.45

Calves weaned/cow	80%	85%	90%	95%
Net cost per calf produced	\$305.56	\$287.59	\$271.61	\$257.32
Net cost per calf sold	407.42	376.08	349.21	325.93
wean wt.	Net cost/cwt. of calf sold			
350	116.41	107.45	99.77	93.12
400	101.86	94.02	87.30	81.48
450	90.54	83.58	77.60	72.43
500	81.48	75.22	69.84	65.19
550	74.08	68.30	63.49	59.26
600	67.90	62.68	58.20	54.32

For each 100 cows: 16 replaced annually, 20 heifer calves retained, 1 bull per 25 cows, 7.5 aum's of forage for winter, 9 aum's of forage for summer, 650 lbs. of hay = 1 aum.

ESTIMATED COSTS OF GROWING REPLACEMENT HEIFER FROM WEANING TO CALVING

Costs	Calved As			
	2 Year Old		3 Year Old	
	(17 mos)		(29 mos)	
	Quantity	Value	Quantity	Value
Feed: alfalfa hay @ \$40	1.75 ton	\$70.00	3 ton	\$120.00
stalk pasture @ \$.10/day & .15/day	150 days	15.00	240 days	28.50
grain @ \$2.50	8 bu	20.00		
summer pasture @ \$10/aum	3.6 aum's	36.00	9.1 aum's	91.00
salt & mineral		2.00		4.50
Total feed		\$143.00		\$244.00
Cash costs other than feed:				
Vet. & medicine		3.00		3.50
Cash costs bldg. & equip		5.00		7.50
Interest on feed @ 11% (1yr)		15.72		26.84
Interest on ave. value animal	(17 mos)	79.24	(29 mos)	127.60
Misc. cash costs		4.00		5.75
Cash costs other than feed		\$106.96		\$171.19
Fixed costs:				
Bull charge		5.50		5.50
Death loss 1.5% ave. value		6.80		7.20
Fixed costs bldgs. & equip.		6.70		10.00
Labor @ \$5.00/hr.	9.5 hrs.	47.50	14 hrs.	70.00
Total fixed costs		\$66.50		\$92.70
Total except overhead & management		\$316.46		\$507.89
Overhead		1.20		2.40
Management		5.50		8.00
Total all costs		\$323.16		\$518.29
Value of heifer at weaning		360.00		360.00
Total		\$683.16		\$878.29

Feed cost/cwt gain

Cost/cwt gain w/o overhead & mg

Cost/cwt. gain, total costs

Break-even selling price/cwt. @ 500 lbs.

1/A \$10 per ton change in the alfalfa hay price, changes the feed cost by \$10/cwt. and total cost gain by \$10.00. A \$10 per ton change in alfalfa changes the feed cost by \$7.50 and total cost by \$7.50.

2/A \$1 per cwt. change in the fall steer calf price changes the break-even selling price by about 15¢. The cost of gain is changed by about 30¢/cwt. by a \$1/cwt. change in steer cost.

ESTIMATED ANNUAL COST OF KEEPING A BULL

Costs	^{1/} 3 Years		^{2/} 4 Years	
	Quantity	Value	Quantity	Value
Feed costs:				
alfalfa hay @ \$40./ton	1.5 ton	\$60.00		
Prairie hay @ \$35./ton			1.5 ton	\$52.50
winter pasture, stalks	90 days	18.00	90 days	22.50
protein @ 1.5 lb./day			100 days	15.00
salt & mineral		3.75		3.75
summer pasture @ \$10./aum	7.5 aum's	75.00		75.00
Total feed costs		\$156.75		\$168.75
Other cash costs:				
Vet. & medicine		12.00		12.00
Cash costs bldgs. & equip.		3.00		2.25
Interest on animal (\$1,000 ave. x 11%)		110.00		110.00
Interest on feed @ 11% for ½ year		8.62		9.28
Misc. cash costs		5.50		5.50
Total cash costs		\$139.12		\$139.03
Fixed costs:				
Death loss @ 0.5% ave value		5.00		5.00
Depr. (1250 - 800 ÷ 3 or 4 yrs)		150.00		112.50
Labor @ \$5.00/hr	10 hrs.	50.00	7.5 hrs	37.50
Fixed costs bldgs. & equip.		14.40		5.80
Total fixed costs except overhead & management		\$219.40		\$160.80
Overhead		1.50		1.50
Management		11.00		11.00
Total all costs		\$527.77		\$481.08
Total cost/cow	30 cows	\$17.59	25 cows	\$19.24

^{1/}General farming area.^{2/}Ranching area.

ESTIMATED COSTS OF WINTERING STEER CALVES TO GAIN .5 LB/DAY
RANCH AREA

Costs	Prairie Hay		Alfalfa and Stalks	
	Quantity	Value	Quantity	Value
Feed: corn @ \$2.50/bu	5.36 bu	\$13.40		
hay @ \$40. alf. \$35. prairie	1 ton	35.00 ^{1/}	.75 ton	\$30.00 ^{1/}
stalk pasture @ \$.15/day			60 days	9.00
protein	100 lbs.	10.00		
salt & mineral		1.00		1.00
Feed costs		<u>\$59.40</u>		<u>\$40.00</u>
Other cash costs:				
Vet. & medicine		3.65		3.65
Marketing		5.50		5.50
Cash costs, bldgs. & equip.		1.65		1.65
Interest on animal 200 day @ 11%		24.11		24.11
Interest on feed @ 11% for ½ yr		3.27		2.20
Misc. cash costs		4.00		4.00
Total of other than feed cash costs		<u>\$42.18</u>		<u>\$41.11</u>
Fixed costs:				
Death loss 1.5% x 400 lb. x \$1.00		6.00		6.00
Labor @ \$5.00/hr	2.6 hrs	13.00	2 hrs	10.00
Fixed costs on facilities		<u>5.00</u>		<u>5.00</u>
Total growing costs except overhead and management		\$125.58		\$102.11
Overhead		1.10		1.10
Management		<u>5.50</u>		<u>5.50</u>
Total growing cost		\$132.18		\$108.71
Steer value (in @ \$1.00/lb) ^{2/}		<u>400.00</u>		<u>400.00</u>
Total all costs		\$532.18		\$508.71
Feed cost/cwt. gain		\$59.40		\$40.00
Cost/cwt. gain w/o overhead & mgt.		125.28		102.11
Cost/cwt. gain, total costs		132.18		108.71
Break-even selling price/cwt. @ 500 lbs.		\$106.44		\$101.74

^{1/}A \$10. per ton change in the prairie hay price, changes the feed cost by \$10/cwt. and total cost gain by \$10.60. A \$10 per ton change in alfalfa changes the feed cost by \$7.50 and total cost by \$7.95.

^{2/}A \$1 per cwt. change in the fall steer calf price changes the break-even selling price by about 86¢. The cost of gain is changed by about 30¢/cwt. by a \$1/cwt. change in steer cost.

ESTIMATED COSTS FOR WINTERING STEER CALVES
TO GAIN 1.0 LB./DAY, RANCH AREA

Costs	Prairie Hay		Corn Silage	
	Quantity	Value	Quantity	Value
Feed: prairie hay @ \$35.1/ ^{1/}	1.3 ton	\$45.50		
silage @ \$22. as fed ^{2/}			2.8 ton	\$61.60
corn @ \$2.50/bu.	10.7 bu.	26.75		
soybean meal @ \$.10/lb.	200 lb	20.00	200 lb	20.00
stalk pasture			60 days	9.00
salt & mineral		1.20		1.20
Feed cost		\$93.45		\$91.80
Vet. & medicine		3.75		3.75
Marketing		6.60		6.60
Cash bldg. & equip. costs		3.30		3.30
Interest on animals 11% 200 days		24.11		24.11
Interest on feed 11% ½ yr.		5.14		5.05
Misc. cash costs		4.00		4.00
Cash cost other than feed		\$46.90		\$46.81
Fixed costs:				
Death loss 1.5% x 400 lbs. x \$1.00		6.00		6.00
Fixed costs bldg. & improvements		6.00		7.00
Labor @ \$5.00 hr	2.6 hrs	13.00	2.6 hrs	13.00
Total growing cost except overhead & management		\$165.35		\$164.61
Overhead		1.65		1.65
Management		5.00		5.00
Total growing cost		\$172.00		\$171.26
Steer calf value @ \$1.00/lb ^{3/}	400 lbs	400.00		400.00
Total all costs		\$572.00		\$571.26
Feed cost/cwt. gain		\$46.72		\$45.90
Cost/cwt. gain except overhead & management		82.67		82.30
Total cost/cwt. gain		86.00		85.63
Break-even price, all costs @ 600 lbs.		\$95.33		\$95.21

1/ A \$10 change in hay price per ton changes the feed cost by \$6.50/cwt, the cost of gain by \$6.86/cwt. and the break-even price/cwt, by \$2.29/cwt.

2/ A \$1 change in silage cost changes the feed cost by \$1.40/cwt., the total cost of gain by \$1.48 and the break-even price by \$0.49.

3/ A \$1 change in the "in" steer calf price changes the cost of gain by about \$.15/cwt. and the break-even price by about \$.72.

ESTIMATED COSTS OF GROWING CALVES TO GAIN 250 LBS.
IN 200 DAY WINTERING PERIOD, USING CORNSTALKS AND ALFALFA HAY
GENERAL FARMING AREA

	Quantity	Value
Feed: alfalfa hay @ \$50. (baled)	1 ton	\$50.00
corn stalk pasture	2 mos	9.00
corn @ \$2.50	12.1 bu	30.25
salt & mineral		1.10
Feed cost		\$90.35
Other cash costs:		
Vet. & medicine		5.25
Marketing		6.75
Cash cost bldgs. & equip.		4.35
Interest on animals @ 11%	200 days	24.11
Interest on feed @ 11%	200 days	5.45
Miscellaneous		4.00
Total cash cost		\$49.91
Fixed costs:		
Death loss 1.5%	\$400.	6.00
Fixed cost facilities		11.00
Labor @ \$5.00	2.65 hrs	13.25
Growing cost except overhead and management		\$170.51
Overhead		1.00
Management		5.50
Total growing cost		\$177.01
Steer cost @ \$1/lb. ^{1/}	400 lbs.	\$400.00
Total all cost		\$577.01
Feed cost per cwt. gain		\$36.14
Growing cost per cwt. gain except overhead and management		\$68.20
Total cost per cwt. gain		\$70.80
Break-even price (all costs)	650 lbs.	\$88.77

^{1/}A change of \$1/cwt. in the steer calf costs, changes the cost per cwt. gain by \$.12 and break-even price by \$.66 per cwt.

ESTIMATED COSTS OF WINTERING 500 LB. STEER CALF
TO GAIN 1.0 POUND PER DAY
USING DROUTH DAMAGED CORN AS SILAGE

	Quantity	Value
Feed: silage @ \$15/T ^{1/}	3.6 ton	\$54.00
protein @ \$.10/lb	200 lbs	20.00
stalk pasture @ \$.15/day	60 days	9.00
salt & mineral		1.10
Feed cost		<u>\$84.00</u>
Other cash costs:		
Vet. & medicine		5.25
Marketing		6.00
Miscellaneous cash costs		3.75
Cash cost bldgs. & equip.		6.50
Interest on animals @ 11%	200 days	27.12
Interest on feed @ 11%	200 days	5.07
Total other cash cost		<u>\$53.69</u>
Cash costs plus feed costs		\$137.79
Fixed costs:		
Death loss @ 1.5%	\$450.	6.75
Fixed cost on facilities		8.00
Labor @ \$5.00	2.5 hrs	12.50
Overhead		2.00
Management		5.00
Total fixed costs		<u>\$34.25</u>
Total growing costs		\$172.04
Steer calf @ \$.90/lb ^{2/}		450.00
Total all costs		<u>\$622.04</u>
Feed cost per cwt. of gain		\$42.05
Feed cost plus cash cost per cwt gain		\$68.90
Cost per cwt. of gain excluding overhead & management		\$85.52
Total cost per cwt. gain		\$86.02
Break-even price	700 lbs.	\$88.86

^{1/} \$15.00 silage price estimated as 1/3 stacked alfalfa hay price - alternative sales price.

^{2/} Each \$1 difference in cost per cwt. will change costs of gain by about \$.19 per cwt. and the break-even price by about \$.77 per cwt.

ESTIMATED COSTS FOR WINTERING AND GRAZING STEER CALVES RANCH AREA

Cost	Wintered to Gain			
	1 lb./day		0.5 lb./day	
	Quantity	Value	Quantity	Value
Feed: prairie Hay @ \$35 ^{1/}	1.3 ton	\$45.50		
alfalfa hay @ \$40 ^{1/}			.75 ton	\$30.00
corn @ \$2.50	10.7 bu	26.75		
protein @ \$.10	200 lb	20.00		
stalk pasture			60 days	9.00
summer pasture @ \$10/aum	2.6 aum's	26.00	2.4 aum's	24.00
salt & mineral		1.00		1.00
Feed costs		\$119.25		\$64.00
Other cash costs:				
Vet. & medicine		4.00		4.00
Marketing @ 1¢/lb		7.75		6.85
Misc. cash costs		5.00		5.00
Cash costs, bldgs. & equip.		2.00		2.00
Interest on animals @ 11%	320 days	38.58	320 days	38.58
Interest on feed @ 11%	.5 yr	6.56		3.52
Cash costs other than feed		\$63.89		\$59.95
Fixed costs:				
Death loss 1.5%		6.00		6.00
Fixed cost on facilities		6.00		6.00
Labor @ \$5.00	3.8 hrs	19.00	3.7 hrs.	18.50
Growing cost without overhead & mgt		\$214.14		\$154.45
Overhead		1.60		1.40
Management		6.00		6.00
Total growing cost		\$221.74		\$161.85
Steer cost @ \$1 lb ^{2/}	400 lbs	400.00	400 lbs	400.00
Total all cost		\$621.74		\$561.85
Feed cost per cwt. gain		\$31.80		\$17.07
Cost per cwt. gain except overhead and management		\$57.10		\$54.19
Cost per cwt gain, total cost		\$59.13		\$56.79
Break-even	775 lbs.	\$80.22	685 lbs.	\$82.02

1/ A \$10/T change in hay price changes the break-even prices about \$1.77 for the 775 lb steer of \$1.15 for the 685 lb steer.

2/ A \$1/cwt. price change per cwt., changes the break-even price by \$0.57 for the 775 lb steer and by \$0.65 for the 685 lb steer. (cost plus interest and death loss).

ESTIMATED COSTS OF BUYING A 550 LB. CALF IN SPRING
AND SELLING OFF GRASS IN FALL, RANCH AREA

Costs	Quantity	Price	Cost
Feed: pasture ^{1/}	4 mos	\$10/steer/mo	\$40.00
salt & mineral			1.00
Feed cost			<u>\$41.00</u>
Other cash costs:			
Vet. & medicine			2.50
Misc. cash costs			2.75
Marketing	730 lbs.	.011/lb	8.03
Cash costs of equip.			2.00
Interest on animal 1/3 yr	\$467.50	0.11	17.14
Interest on feed 1/3 yr	41.00	0.11	1.50
Total other cash costs			<u>\$33.92</u>
Death loss	\$467.50	.01	4.68
Labor	1.25 hrs	\$5.00	<u>6.25</u>
Growing costs without overhead & mgt			\$85.85
Overhead			.60
Management			<u>6.00</u>
Total growing cost			\$92.45
Steer cost ^{2/}	550 lbs.	.85	<u>\$467.50</u>
Total all costs			\$559.95
Feed cost per cwt. gain ^{1/}			\$22.78
Growing cost without overhead & mgt ^{1/}			\$47.69
Total growing cost per cwt. ^{1/}			\$51.36
Break-even price @ 730 lbs. ^{1/}			\$76.71

^{1/} A change of \$1/mo/steer in pasture rates changes the feed cost by \$2.22 cwt. gain, the growing costs by \$2.35 and the break-even price by \$0.57.

^{2/} A \$1/cwt. change in the steer cost changes the growing costs by \$0.26/cwt. and the break-even by \$0.79 per cwt.

ESTIMATED COSTS OF BUYING A 550 LB. CALF IN SPRING
AND SELLING OFF GRASS IN FALL, FARM AREA

Costs	Quantity	Price	Cost
Feed: pasture ^{1/}	4 mos.	\$9/steer/mo	\$36.00
salt & mineral			1.00
Feed cost			\$37.00
Other cash cost:			
Vet. & medicine			2.75
Misc. cash costs			2.75
Marketing	730 lbs.	.01/lb	7.30
Cash equip costs			2.50
Interest on animal 1/3 yr	\$467.50	.11	17.14
Interest on feed 1/3 yr	37.00	.11	1.36
Cash cost other than feed			\$33.80
Death loss	\$467.50	.01	4.68
Labor	1.5 hrs	5.00	7.50
Growing cost without overhead & mgt			\$82.98
Overhead			0.75
Management			6.00
Total growing cost			\$89.73
Steer cost ^{2/}	550 lb	.85	467.50
Total all costs			\$557.23
Feed cost per cwt. gain ^{1/}			\$20.56
Growing cost per cwt. except overhead & mgt ^{1/}			\$46.10
Total growing costs per cwt. ^{1/}			\$49.85
Break-even price @ 730 lbs.			\$76.33

^{1/} A change of \$1/mo/steer in pasture rates, changes the feed cost/cwt. gain by \$2.22, the growing costs by \$2.31/cwt and the break-even price by \$0.57.

^{2/} A \$1/cwt. change in the steer cost, changes the growing costs by \$0.26/cwt. and the break-even price by \$0.79/cwt.

ESTIMATED COSTS OF
FEEDING OUT 400 LB. STEER CALF AND A 650 LB. YEARLING ON SILAGE

	400 Lb. Calf		650 Lb. Yearling	
	Quantity	Value	Quantity	Value
Feed: Silage @ \$22/ton	8 1/2	\$187.00	6 3/4	\$148.50
Protein @ \$.10 /lb.	365 lb	36.50	225 lb	22.50
Salt & mineral		<u>2.00</u>		<u>2.00</u>
Total Feed Cost		\$225.50		\$173.00
Other Cash Costs:				
Vet. & medicine		3.90		3.25
Marketing		12.65		12.65
Misc. cash costs		5.70		5.30
Cash costs on bldg. & equip		15.30		13.15
Interest on animals @ 11%* 365 days		44.00	225 days	37.45
Interest on feed & op. exp.@11% 365 days		<u>13.75</u>	225 days	<u>6.60</u>
Total Other Cash Costs		\$95.30		\$78.40
Total Feed and Other Cash Costs		\$320.80		\$251.40
Death loss 2%		8.00	3/4%	4.15
Fixed costs on facilities**		12.10		12.10
Labor @ \$5/hr. 4.8 hr.		<u>24.00</u>	2.95 hr.	<u>14.75</u>
Cost of Gain Except Overh. & Mgt.		\$364.90		\$282.40
Overhead		3.15		2.30
Management		<u>10.00</u>		<u>10.00</u>
Total Cost of Gain		\$378.05		\$294.70
Steer Cost (laid in)*** @ \$1/lb.		<u>400.00</u>	@ \$.85/lb.	<u>552.50</u>
Total Cost of Market Wt. Steer 1,050 lb.		\$778.05	1,100 lb.	\$847.20
Feed Cost/Cwt. Gain 6.5 cwt.		\$34.69	4.5 cwt.	\$38.44
Cost/Cwt. Gain w/o Overh. & Mgt. 6.5 cwt.		56.14	4.5 cwt.	62.76
Total Cost/Cwt. Gain 6.5 cwt.		58.16	4.5 cwt.	65.49
Break-even Selling Price/Cwt. 10.5 cwt.		74.10	11 cwt.	77.02

* Each 1% change in the interest rate changes the break-even selling price \$.50/cwt. (calf) and \$.36/cwt. (yearling).

** Based on an investment of \$118 per head capacity in lots and equipment.

*** Each \$1/cwt. change in the purchase price of the feeder steer changes the following: Total Cost, \$4.52 (calf), \$6.99 (yearling); Cost of Gain \$.08/cwt. (calf), \$.12/cwt (yearling); and the Break-even Selling Price \$.43/cwt. (calf), \$.64/cwt. (yearling).

ESTIMATED COSTS OF FEEDING
500 POUND STEER CALF ON HIGH CONCENTRATE RATION

Costs	With Corn At:			
	\$2.00	\$2.25	\$2.50	\$2.75
Feed: Corn, 70 bu.	\$140.00	\$157.50	\$175.00	\$192.50
Hay, .45 ton @ \$50	22.50	22.50	22.50	22.50
Protein, 210 lb. @ \$.10	21.00	21.00	21.00	21.00
Salt & mineral	1.00	1.00	1.00	1.00
Total Feed Cost	\$184.50	\$202.00	\$219.50	\$237.00
Other Cash Costs:				
Vet. & medicine	4.15	4.15	4.15	4.15
Marketing	12.65	12.65	12.65	12.65
Misc. cash costs	4.30	4.30	4.30	4.30
Cash costs on bldg. & equip.	11.05	11.05	11.05	11.05
Interest on animals, 230 days, @ 11%*	33.60	33.60	33.60	33.60
Interest on feed & op. exp. @ 11%	7.05	7.65	8.25	8.85
Total Other Cash Costs	\$72.80	\$73.40	\$74.00	\$74.60
Total Feed & Other Cash Costs	\$257.30	\$275.40	\$293.50	\$311.60
Death loss, 2%	9.70	9.70	9.70	9.70
Fixed costs on facilities**	18.85	18.85	18.85	18.85
Labor, 3 hr. @ \$5.00	15.00	15.00	15.00	15.00
Cost of Gain Except Overh. & Mgt.	\$300.85	\$318.95	\$337.05	\$355.15
Overhead	2.10	2.10	2.10	2.10
Management	10.00	10.00	10.00	10.00
Total Cost of Gain	\$312.95	\$331.05	\$349.15	\$367.25
Steer Cost, 500 lb. @ \$.97 (laid in)***	485.00	485.00	485.00	485.00
Total Cost of 1100 lb. Steer	\$797.95	\$816.05	\$834.15	\$852.25
Feed Cost/Cwt. Gain (6 cwt.)	\$30.75	\$33.67	\$36.58	\$39.50
Cost/Cwt. Gain w/o Overhead & Management	50.14	53.16	56.18	59.19
Total Cost/Cwt. Gain	52.16	55.18	58.19	61.21
Break-even Selling Price/Cwt. (11 cwt.)	72.54	74.19	75.83	77.48

* Each 1% change in the interest rate changes the break-even selling price \$.35/cwt., at a corn price of \$2.50/bu.

** Based on an investment of \$118 per head capacity in lots and equipment.

*** Each \$1/cwt. change in the purchase price of the feeder steer changes the following: Total Cost, \$5.45; Cost of Gain, \$.08/cwt.; and the Break-even Selling Price, \$.50/cwt.

ESTIMATED COST OF FEEDING 700 LB.
YEARLING STEER ON HIGH CONCENTRATE RATION

Costs	With Corn At:			
	\$2.00	\$2.25	\$2.50	\$2.75
Feed: Corn, 53 bu.	\$106.00	\$119.25	\$132.50	\$145.75
Hay, 0.22 ton @ \$50	11.00	11.00	11.00	11.00
Protein, 155 lb. @ \$.10	15.50	15.50	15.50	15.50
Salt & mineral	1.00	1.00	1.00	1.00
Total Feed cost	\$133.50	\$146.75	\$160.00	\$173.25
Other Cash Costs:				
Vet. & medicine	3.20	3.20	3.20	3.20
Marketing	12.65	12.65	12.65	12.65
Misc. cash costs	4.30	4.30	4.30	4.30
Cash costs on bldg. & equipment	10.45	10.45	10.45	10.45
Interest on animals 140 days @ 11%*	24.85	24.85	24.85	24.85
Interest on feed & op. exp. @ 11%	3.15	3.45	3.75	4.05
Total Other Cash Costs	\$58.60	\$58.90	\$59.20	\$59.50
Total Feed and Other Cash Costs	\$192.10	\$205.65	\$219.20	\$232.75
Death loss, 1%	5.95	5.95	5.95	5.95
Fixed costs on facilities**	8.10	8.10	8.10	8.10
Labor 2½ hr. @ \$5.00	11.25	11.25	11.25	11.25
Cost of Gain Except Overhead & Mgt.	\$217.40	\$230.95	\$244.50	\$258.05
Overhead	1.75	1.75	1.75	1.75
Management	10.00	10.00	10.00	10.00
Total Cost of Gain	\$229.15	\$242.70	\$256.25	\$269.80
Steer Cost 700 lb. @ \$.85 (laid in)***	595.00	595.00	595.00	595.00
Total Cost of 1100 lb. Steer	\$824.15	\$837.70	\$851.25	\$864.80
Feed Cost/Cwt. Gain (4 cwt.)	\$33.38	\$36.69	\$40.00	\$43.31
Cost/Cwt. Gain w/o Overhead & Management	54.35	57.74	61.13	64.51
Total Cost/Cwt. Gain	57.29	60.68	64.06	67.45
Break-even Selling Price/Cwt. (11 cwt.)	74.92	76.15	77.39	78.62

* Each 1% change in the interest rate changes the break-even selling price \$.24/cwt., at a corn price of \$2.50/bu.

** Based on an investment of \$118 per head capacity in lots and equipment.

*** Each \$1/cwt. change in the purchase price of the feeder steer changes the following: Total Cost, \$7.36; Cost of Gain, \$.09/cwt.; and the Break-even Selling Price, \$.67/cwt.

APPENDIX I

ESTIMATED IRRIGATION COSTS, 1980

Irrigation costs were estimated with the aid of the AGNET "Pump" computer program. Energy prices used in the cost computations are those which were expected to occur in 1980. Irrigation equipment, well drilling, and land shaping costs which were collected by a telephone survey of selected dealers in September, 1979, were used.

Costs were calculated for four well depths for a gravity system which has an output of 1,000 gpm and irrigates 100 acres. Costs of both high pressure (75 psi) and low pressure (40 psi) center pivot systems with outputs of 800 gpm and coverages of 130 acres were also calculated for four well depths. The investments required for three example systems are shown below.

	Gravity System 1,000 gpm, 100 ac 150' hd, diesel	High Pressure Center Pivot System 800 gpm, 130 ac 325' hd, diesel	Low Pressure Center Pivot System 800 gpm, 130 ac 250' hd, diesel
Well (250')	\$7,150	\$7,150	\$7,150
Reservoir (sump pit)	3,850	---	---
Pump	7,480	7,350	6,750
Power Unit	7,140	9,080	7,720
Gearhead & Spicer Shaft	1,520	1,630	1,520
Fuel Tank, 200 gal	720	720	720
Pipe and Fittings	5,500	---	---
Sprinkler System (10 tower elect)	---	32,450	32,450
Electric Generator	---	1,510	1,510
Leveling	16,500	2,750	2,750
Reuse System	6,600	---	---
Total Investment	\$56,460	\$62,640	\$60,570

Fixed irrigation costs (depreciation, interest on the investment, and insurance) were calculated from the investment costs using the following factors.

Depreciation rates:

Wells	4%	(25 yr life)
Reservoirs	4%	(25 yr life)
Pumps	5.56%	(18 yr life)
Power Units		
Nat. Gas or Propane	11.1%	(9 yr life)
Diesel	6.67%	(15 yr life)
Electric	5%	(20 yr life)
Gearhead	5.56%	(18 yr life)
Fuel Tanks & Lines	5%	(20 yr life)
Pipe	6.67%	(15 yr life)
Sprinkler System	6.67%	(15 yr life)
Reuse System	4%	(25 yr life)

Interest was figured at 5.5% of original investment on all items except leveling. (This is equivalent to 11.0% on the average undepreciated balance). Interest and taxes on the investment in leveling were figured at 7.5%.

Variable irrigation costs (energy, lubrication, repairs, and service labor) were calculated using engineering formulas and anticipated 1980 energy prices. Power units were assumed to be operating at 85% of the Nebraska performance standards. Labor for operating irrigation systems was not included here. It is shown as a separate item in each of the individual crop budgets. Energy prices used in the calculations were as follows:

Electricity	6.5¢ per kwh
Natural Gas	\$1.80 per 1,000 cu. ft.
Propane	45¢ per gallon
Diesel	95¢ per gallon

The resulting fixed and variable irrigation costs are presented on a per-acre basis in the tables below. The variable costs shown are for 12 inches of water pumped (10.2 net inches with center pivot, 8.4 net inches with gated pipe system with re-use). If more or less water is needed, the variable costs can be changed proportionately. The fixed costs per acre will not be affected by the annual volume pumped.

Gravity Irrigation (gated pipe with reuse system, 1,000 gpm, 10 psi, based on 100 acres)

Head (ft.)*	75	150	225	300
Lift (ft.)	52	127	202	277

Fixed costs**(per acre):

Electric	\$48.84	\$53.73	\$60.22	\$65.93
Natural gas	50.82	55.71	67.26	---
Propane	51.20	56.09	67.65	---
Diesel	55.40	60.83	68.04	73.77

Variable costs**(per acre foot):

Electric	\$12.65	\$21.70	\$30.76	\$39.81
Natural gas	8.12	12.27	16.81	---
Propane	13.47	22.43	31.38	---
Diesel	15.61	27.37	39.13	50.89

High Pressure Center Pivot Irrigation (800 gpm, 75 psi, based on 130 acres)

Head (ft.)*	250	325	400	475
Lift (ft.)	77	152	227	302

Fixed costs**(per acre):

Electric	\$50.15	\$53.38	\$58.62	\$63.17
Natural gas	52.06	59.99	---	---
Propane	51.81	59.75	---	---
Diesel	56.25	60.13	64.57	71.89

Variable costs*** (per acre foot):

Electric	\$39.27	\$48.26	\$57.26	\$66.25
Natural gas	23.33	27.59	---	---
Propane	39.63	48.30	---	---
Diesel	47.99	59.40	70.82	82.23

Low Pressure Center Pivot Irrigation (800 gpm, 45 psi, based on 130 acres)

Head (ft)*	180	250	330	400
Lift (ft.)	77	152	227	302
Fixed costs**(per acre):				
Electric	\$49.27	\$55.21	\$57.26	\$61.85
Natural gas	50.89	58.06	---	---
Propane	50.65	57.83	---	---
Diesel	55.11	59.08	63.81	70.38
Variable costs***(per acre foot):				
Electric	\$30.96	\$39.95	\$48.95	\$57.94
Natural gas	19.57	23.64	---	---
Propane	31.61	40.29	---	---
Diesel	37.44	48.86	60.27	71.68

* Head = (ft. of vertical lift) + (2.31 x psi at discharge).

** Fixed costs include depreciation, interest on the investment and insurance.

*** Variable costs shown here include: energy, lubrication, repairs, and service labor. The cost of labor for irrigating is not included.

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