

Dryland Rotations]

| Rotation: Winter Wheat - Corn - Cool Season Broadleaf | | | |
|--|---------------------|-------------|----------------------|
| Year | Winter Wheat | Corn | Flax/Chickpea |
| 1993 | 83 | 131 | 30 |
| 1994 | 41 | 105 | 22 |
| 1995 | 51 | 90 | 18 |
| 1996 | 60 | 95 | 17 |
| 1997 | 65 | 121 | 1650 ¹ |
| Average | 60 | 110 | 22/1650 ¹ |

¹ 1997 Broadleaf crop - lbs/ac

| Crop | Cost² | Income | Profit |
|------------------|-------------------------|---------------|---------------|
| Wheat | \$130 | \$80 | \$50 |
| Corn | \$178 | \$219 | \$41 |
| Flax (1993-1996) | \$112 | \$92 | <\$20> |
| Chickpea (1997) | \$208 | \$198 | <\$10> |
| Rotation - FX/CP | \$140/172 | \$164/199 | \$24/27 |

² Used 1997 production costs (except flax) for calculating 1993-1997 average profit per acre.

| Rotation: Spring Wheat - Winter Wheat - Corn/Sorghum - Warm Season Broadleaf | | | | |
|---|---------------------|---------------------|-------------|--------------------------|
| Year | Spring Wheat | Winter Wheat | Corn | Soybean/Sunflower |
| 1993 | 69 | 72 | 120 | 33/1670 |
| 1994 | 32 | 41 | 120 | 28/950 |
| 1995 | 51 | 56 | 111 | 36/1700 |
| 1996 | 58 | 58 | 105 | 24/1698 |
| 1997 | 49 | 71 | 115 | 43/1912 |
| Average | 52 | 60 | 114 | 33/1586 |

| Crop | Cost² | Income | Profit |
|--------------------------|-------------------------|---------------|---------------|
| Spring Wheat | \$112 | \$167 | \$55 |
| Winter Wheat | \$113 | \$180 | \$47 |
| Corn | \$182 | \$228 | \$46 |
| Soybeans/Sunflowers | \$121/134 | \$163/143 | \$42/9 |
| Rotation - SB/Sunflowers | \$137/145 | \$185/180 | \$48/35 |

² Used 1997 production costs for calculating 1993-1997 average profit per acre.

| Rotation: Winter Wheat - Warm Season Broadleaf - Corn/Sorghum - Cool Season Broadleaf | | | | |
|--|---------------------|--------------------------|-------------|-------------------------------------|
| Year | Winter Wheat | Soybean/Sunflower | Corn | Lentil/Field Pea³ |
| 1993 | 54 | 41/1580 | 120 | 1150 |
| 1994 | 32 | 28/1050 | 65 | 1200 |
| 1995 | 60 | 32/1140 | 108 | 800 |

| | | | | |
|---------|----|---------|-----|------|
| 1996 | 58 | 24/2135 | 75 | 1000 |
| 1997 | 45 | 47/1960 | 142 | 0/42 |
| Average | 50 | 34/1573 | 101 | 830 |

³ Field peas in bu/ac

| Crop | Cost ² | Income | Profit |
|--------------------------|-------------------|-----------|-----------|
| Winter Wheat | \$140 | \$150 | \$10 |
| Soybean/Sunflower | \$151/161 | \$171/142 | \$20/<19> |
| Corn | \$149 | \$204 | \$55 |
| Lentil | \$105 | \$117 | \$12 |
| Rotation - SB/Sunflowers | \$136/143 | \$161/173 | \$25/10 |

² Used 1997 production costs for calculating 1993-1997 average profit per acre.

² 1997 Production Costs were calculated using "Cost And Return Estimator (CARE)". CARE calculates ownership, operating, labor, and fuel costs for each field operation. Care also calculates capital costs (interest on materials), drying costs, and land charges.

1997 Costs Include: *(Item amount/acre)*

- Land Charges \$30.00
- Insecticide Treatment on Corn & Sunflower acres \$9.45
- Amortized Costs
- Three Year Rotation - 1,800 acres \$6.87
- Four Year Rotation - 2,400 acres

Amortization Cost for Dakota Lakes Research Farm

- Semi-tractor \$7,000
- Grain trailer \$15,300
- Bins with dryers \$20,000
- Grain Cart \$7,700
- **Total \$50,000**

Overhead costs include semi-tractor, grain trailer, grain cart, grain bins and Operation and Maintenance (O&M) cost of this equipment. Semi-tractor, trailer, and grain cart costs are amortized over 10 years and 10% interest. The cost of the grain bins and drying facilities are amortized over 20 years and 10% interest. The yearly amortized cost is then divided by the potential number of acres that could be farmed in a given rotation.

Semi-tractor, grain trailer, grain cart = \$30,000 O&M = \$3,000.

- Amortization Factor for 10 years @ 10% interest is .163.
- Yearly amount = \$7,890

Grain bins and drying facilities = \$20,000 O&M = \$2,141.

- Amortization Factor for 20 years @ 10% interest is .117.
- Yearly amount = \$4,481

Total Annual Amortized Cost for the above equipment = \$12,371

Prices used for income (1993-1997) calculations are as follows:

- Corn - \$2/bu
- Winter Wheat - \$3/bu
- Spring Wheat - \$3.20/bu

- Flax - \$4.20/bu
- Soybeans \$5/bu
- Field Peas \$.50/bu
- Sunflower \$9/cwt
- Popcorn \$.12/lb
- Chickpea \$.12/lb
- Lentils \$.14/lb

Government Farm Program Benefits Were NOT Included As Income.