



# Does Growing Grass Pay The Bills?

## Session 4

2007 Saskatchewan Beef Symposium

February 7-8, 2007

Lorne Christopherson Weldon, SK

Kathy Lang, University of Saskatchewan

# Overview

- Land conversion economics example
- Compare yield, revenue, expense
  - Tame pasture vs. Continuous cropping
- Using Lorne Christopherson case study



# Background

- In 2000: Lorne partnered with SAF, WBDC & CARDS
- Looking for alternative land uses after Crow removed in 1995
- 6 years of data has been collected
- Granrude's - sown to m. brome/alfalfa
- Dahl's West - kept in continuous cropping



# Christopherson Operation

- Mixed operation near Weldon, SK
  - 5,000 acres cropland
  - 350 cows calving in 2007
- Kamsack/Shellbrook Silty Loam
- Valued at \$4800-\$5200 per quarter under old assessment system



# Adjacent Land Bases

- **Dahl's West (Left as cropland)**
  - ½ section
  - 230 cultivated acres
- **Granrude's (Converted to grass)**
  - 3 – ¼ sections
  - 370 cultivated acres



# Yield Map (2000)

Client: Lorne Christopherson

Farm: HOME FARM

Field: DAHL'S WEST

Harvested Acres: 218.15

Date: 12/9/2000-15/9/2000

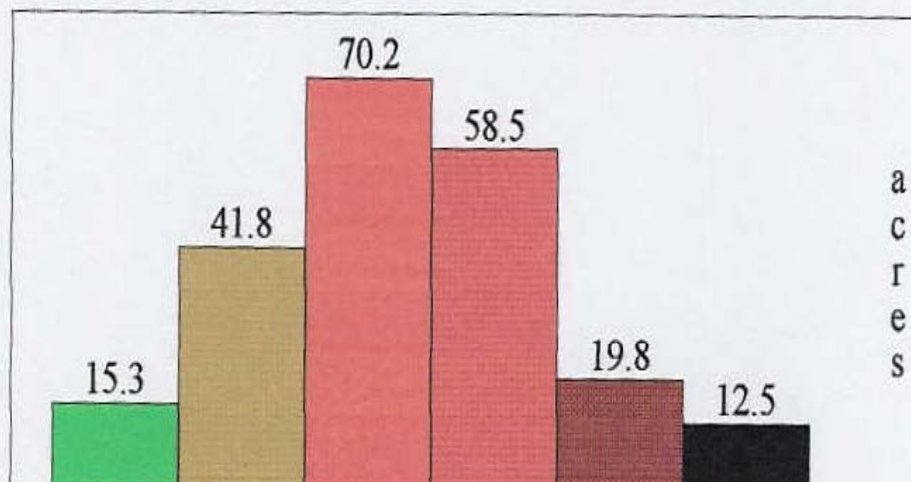
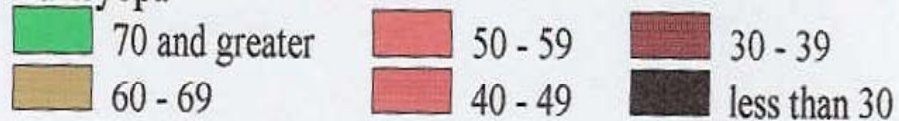
Yield: 53.86 bpa

Moisture: 11.96%

Documented Hours: 22.59



## Barleybpa



## Yield Map (1999)

Client: Lorne Christopherson

Farm: HOME FARM

Field: GRANRUDE'S

Harvested Acres: 379.21

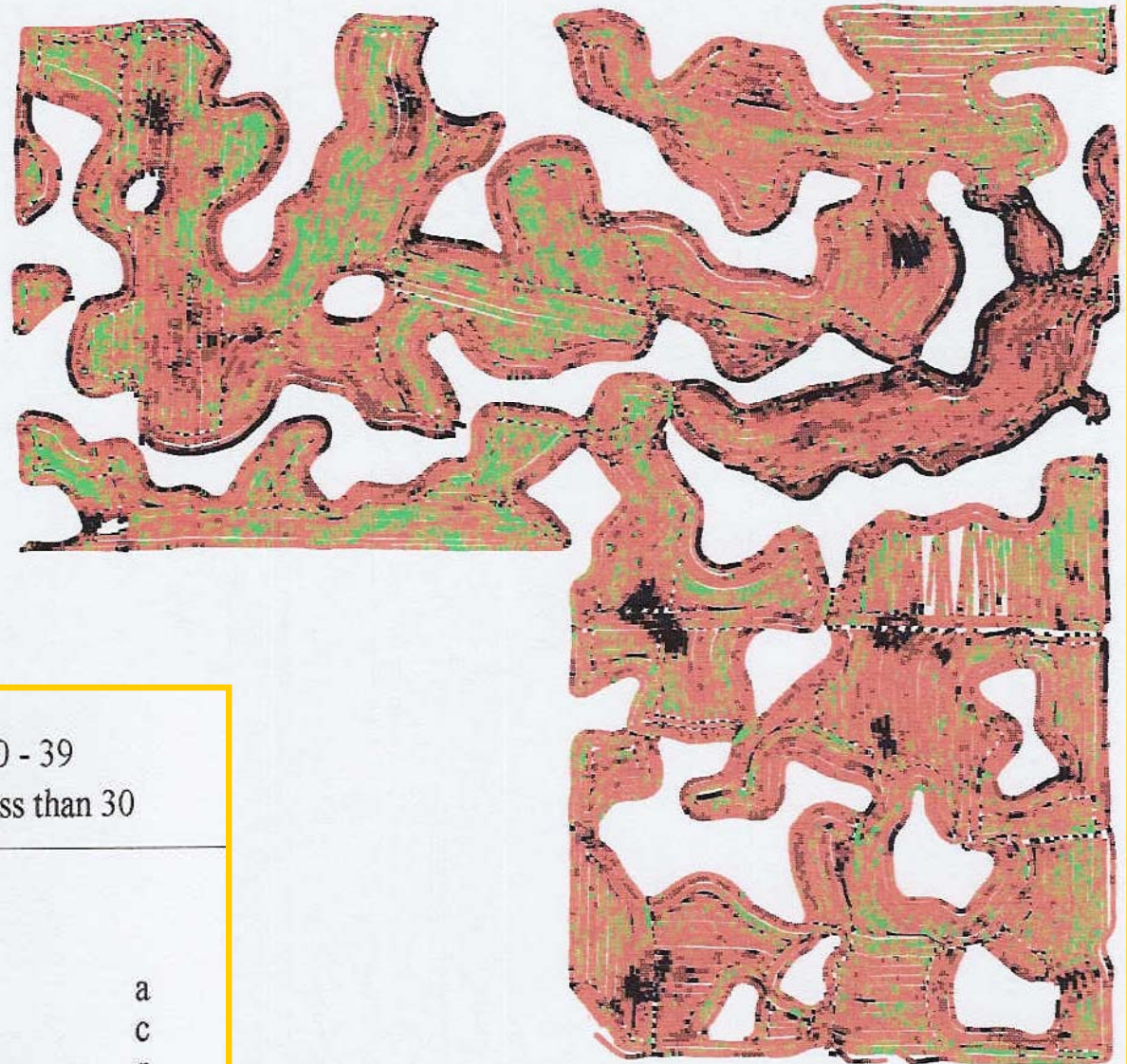
Date: 9/9/1999-19/10/1999

Yield: 50.29 bpa

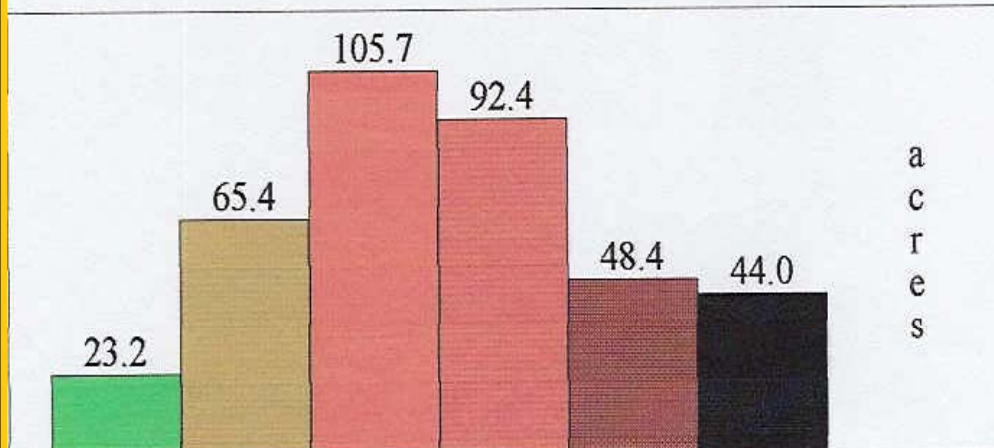
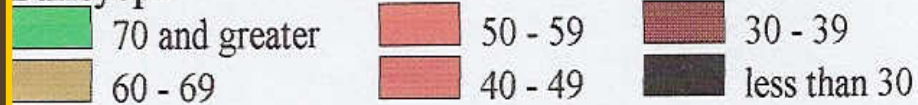
Moisture: 16.82%

Documented Hours: 37.40

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### Barleybpa



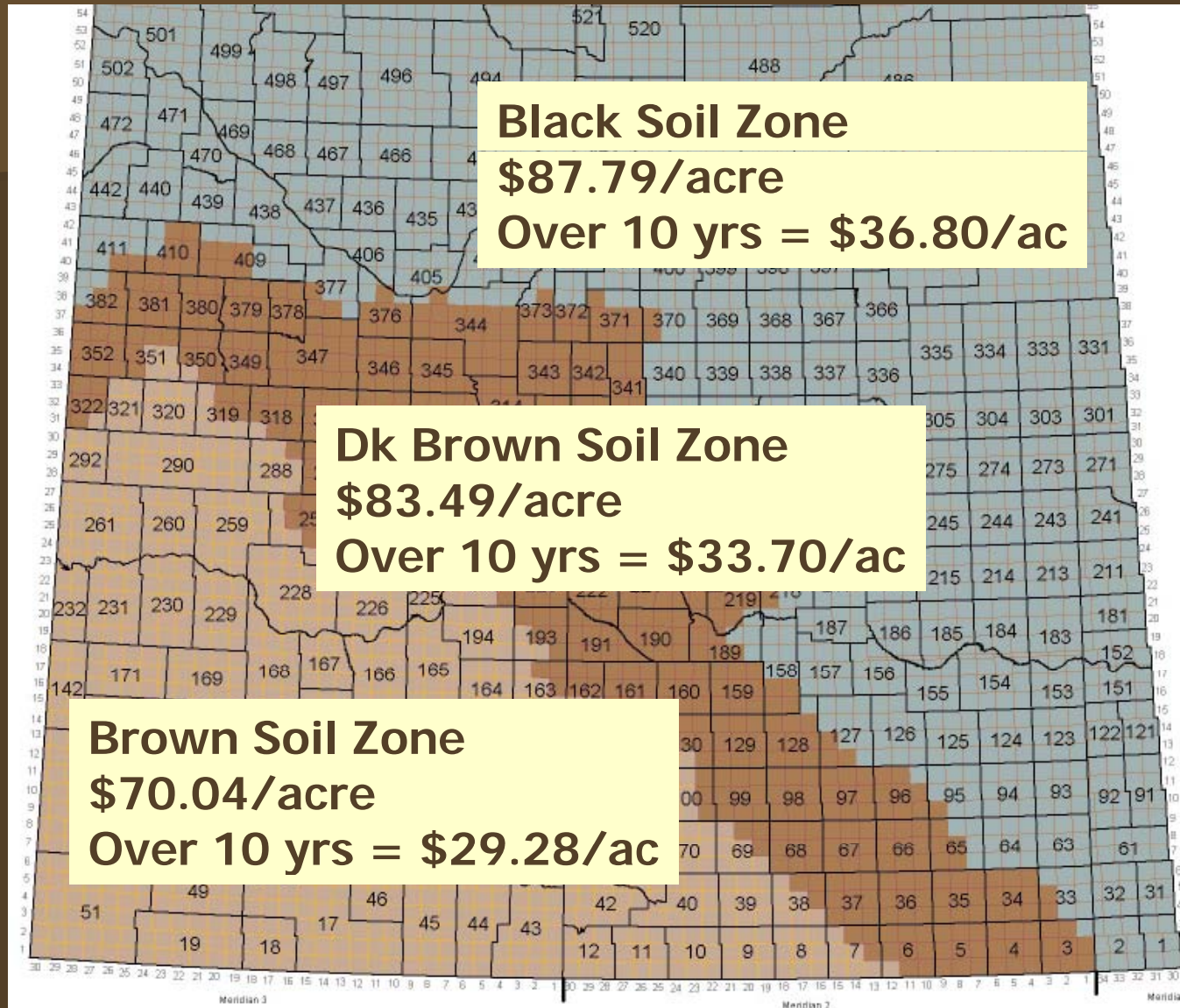
# Granrude's Year 1 - 2000

- 278 ac seeded meadow brome-alfalfa
  - Not grazed until 2001
- Oats nurse crop → Greenfeed
- Sowed 92 ac canola → Cashflow
- Land development
  - Cross-fenced into 5 fields
  - Shallow dugout

## Granrude's 2000

<b>Production</b>	<b>\$ Total</b>	<b>\$/Acre</b>
Canola ~24 bu/ac @ \$6/bu	13,248	
Greenfeed 2.06 tonne/ac @ \$40/tonne	22,907	
<b>Total Gross Product</b>	<b>36,155</b>	<b>97.72</b>
<b>Expenses</b>		
Total Seeding	11,170	30.19
Total Fertilizer	8,684	23.47
Total Herbicide	4,625	12.50
Swathing/Baling/Harvesting/Hauling	12,490	33.76
Land Rent	11,100	30.00
Dugout Development	1,000	2.70
Total Fencing & Labour Costs	5,560	15.03
Forage Establishment Insurance	834	2.25
<b>Total Expenses</b>	<b>55,464</b>	<b>149.90</b>
<b>RETURN</b>	<b>(19,309)</b>	<b>(52.18)</b>

# SAF Pasture Development Estimates



# Black Soil Zone Pasture Development Costs

Variable Expense	Cost/Acre
Drill & Tractor Rental	\$13.81
Custom Spraying	\$4.50
Burn off (1 L/acre)	\$9.00
Alfalfa Seed (1 lb/ac)	\$3.25
Md. Brome Seed (10 lb/ac)	\$18.00
Taxes	\$3.50
<b>Total Variable Expenses</b>	<b>\$53.90</b>
<b>Other Expenses</b>	
Interest on land	\$13.00
Deprec./Int. fence & dugout	\$4.51
License, insurance, overhead	\$1.90
Custom-breaking Year 10	\$14.48
<b>Total pasture expenses per acre</b>	<b>\$87.79</b>

Source: SAF Website



# Granrude's Year 2 - 2001

- Grazing began on 278 ac sown in 2000
  - 200 pairs for 81 d
  - 8 bulls for 65 d
- Remaining 92 ac sown to meadow brome-alfalfa
  - Oats nurse crop used
  - Grazed 200 cows for 10 d
- Value: \$1/d for cows & \$1.50/d for bulls
- Cows pulled because of low water levels
- Baled 100 – 1800 lb bales worth \$90/ba



# Granrude's Year 3- 2002

- Cross-fenced → added 2 fields
- Dugout dry → Pumped water all summer
- Grazing
  - 165 pairs for 134 days @ \$1/day
  - 8 bulls for 65 days @ \$1.50/day
- Bales
  - 90 - 1800 lb. bales worth \$90/bale

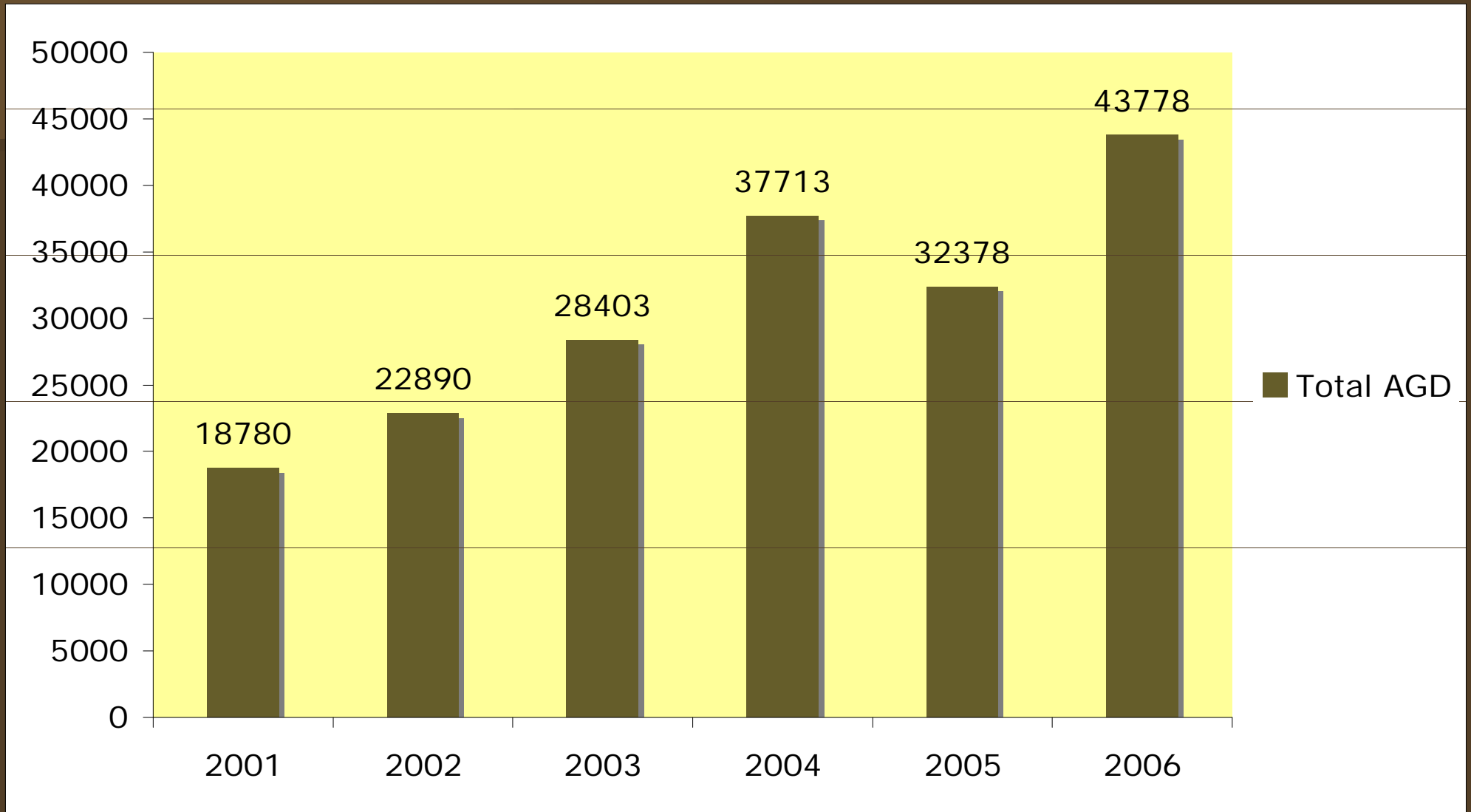


# Granrude's 2003-2006

- 2003 Grazing
  - 210 pairs for 134 days; 7 bulls for 65 days
- 2004 Grazing
  - 265 pairs for 139 d; 9 bulls for 65 d
- 2005 Grazing
  - 300 pairs for 105 d; 9 bulls for 65 d
- 2006 Grazing
  - 300 pairs for 143 d; 9 bulls for 65 d



# Total Animal Grazing Days, 2001-2006



# Dahl's West Yield Review

- 2000:Malt barley 54 bu/ac @ \$3.08/bu
- 2001:Flax went 18 bu/ac @ \$7.65/bu
- 2002:Drought → \$135/ac insurance payout
- 2003:Barley 70 bu/ac @ \$2.25/bu
- 2004:Canola 26 bu/ac @ \$6.25/bu
- 2005:Barley 70 bu/ac @ \$1.65/bu
- 2006:Canola 35 bu/ac @ \$7.50/bu



# Granrude's 2005

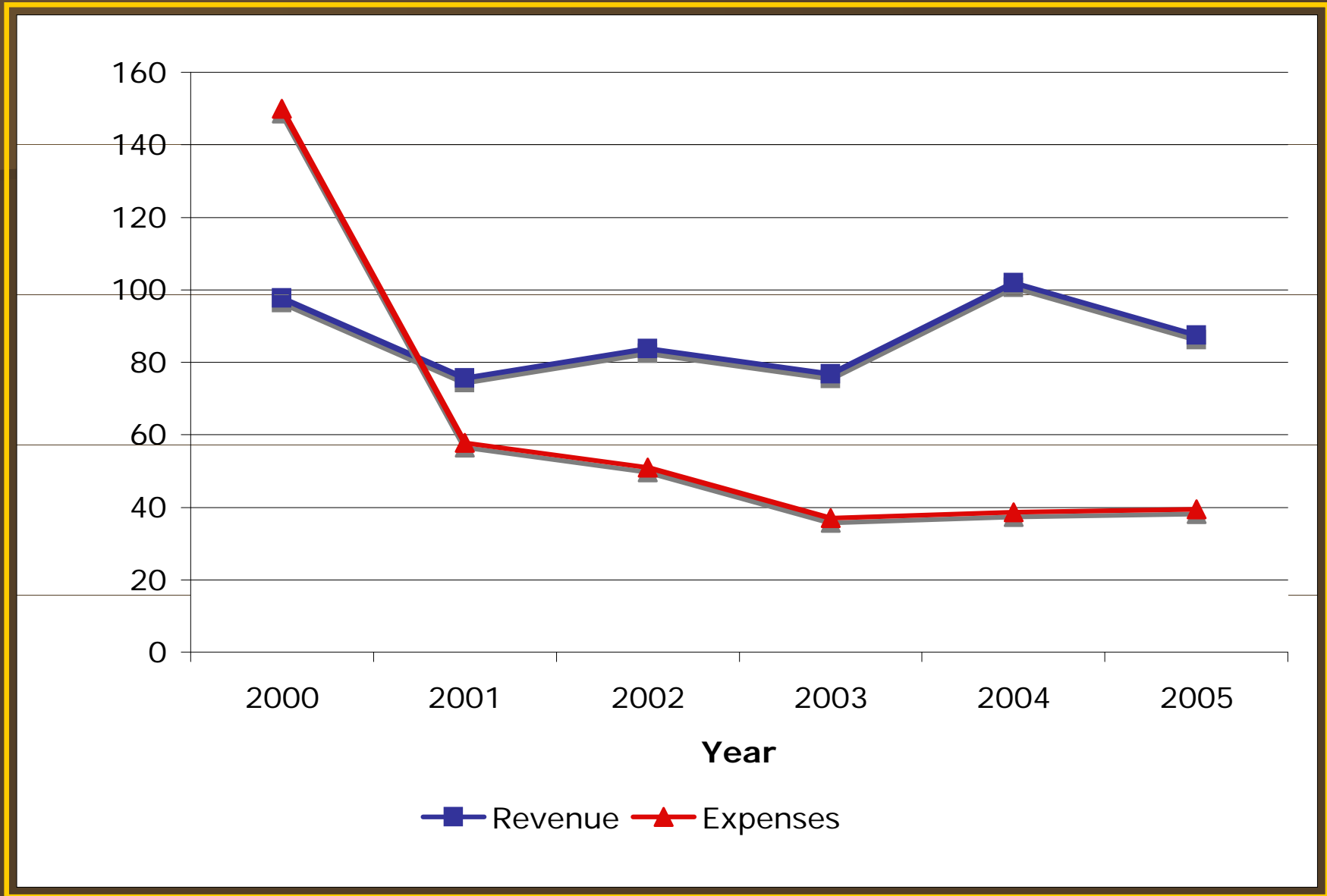
<b>Production</b>	<b>\$ Total</b>	<b>\$/Acre</b>
300 c/c pairs 105 d @ \$1/d	31,500	85.14
9 Bulls ~ 65 d @ \$1.50/d	878	2.37
<b>Total Gross Product</b>	<b>32,378</b>	<b>87.51</b>
<b>Expenses</b>		
Land Rent	11,100	30.00
Supplemental Mineral	2,000	5.41
Fuel/Truck to Check Pastures	1,000	2.70
Fence Repair	500	1.35
<b>Total Expenses</b>	<b>14,600</b>	<b>39.46</b>
<b>RETURN</b>	<b>17,778</b>	<b>48.05</b>



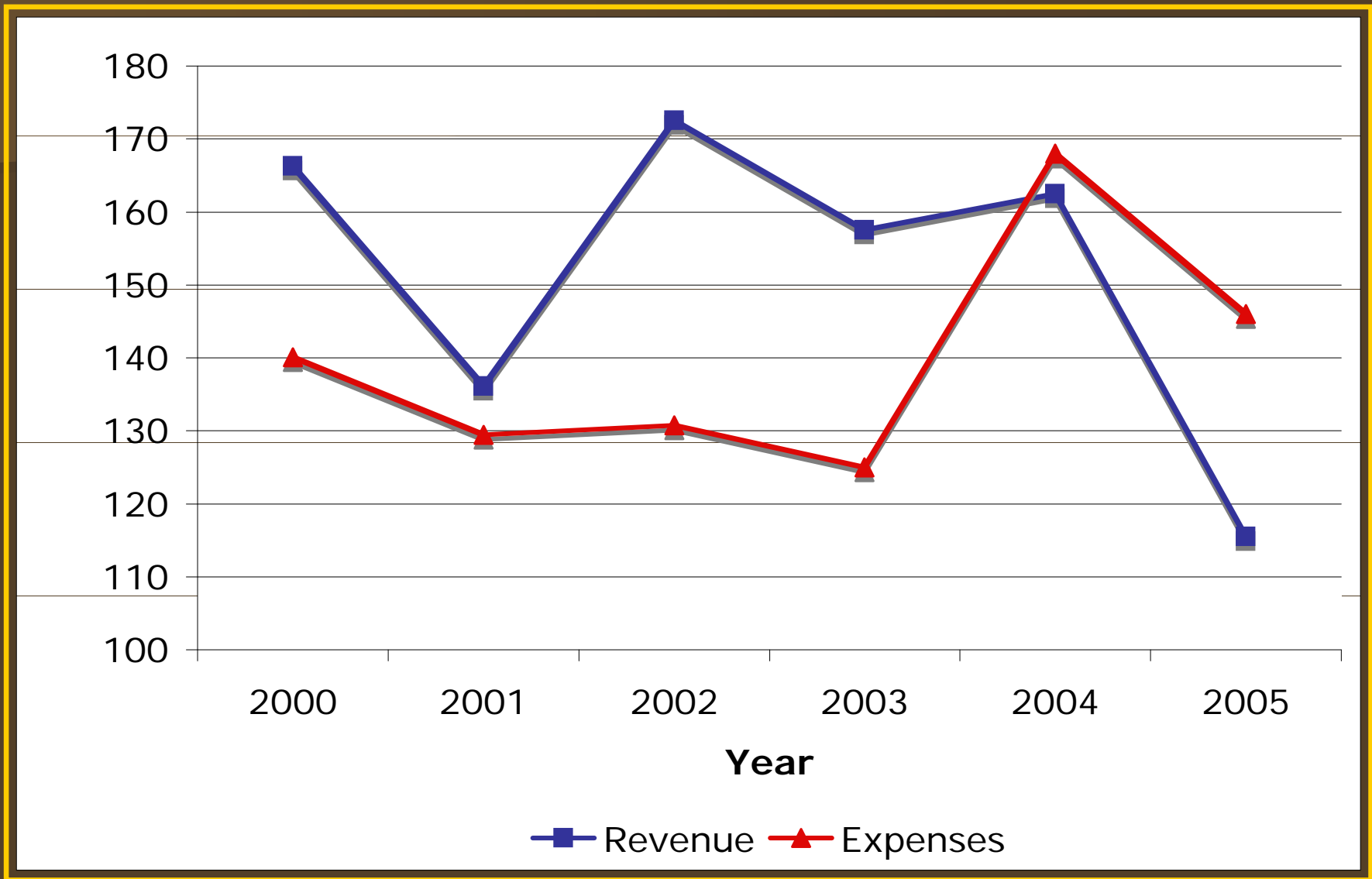
## Dahl's West 2005

<b>Production</b>	<b>\$ Total</b>	<b>\$/Acre</b>
Feed Barley 70 bu/ac @ \$1.65/bu	26,565	115.50
<b>Total Gross Product</b>	<b>26,565</b>	<b>115.50</b>
<b>Expenses</b>		
Total Seeding (incl. seed)	7,130	31.00
Total Fertilizer	6,900	30.00
Total Chemical	4,600	20.00
Swathing	2,300	10.00
Total Harvesting	4,600	20.00
Land Rent	6,900	30.00
Insurance Premium	1,150	5.00
<b>Total Expenses</b>	<b>33,580</b>	<b>146.00</b>
<b>RETURN</b>	<b>(7,015)</b>	<b>(30.50)</b>

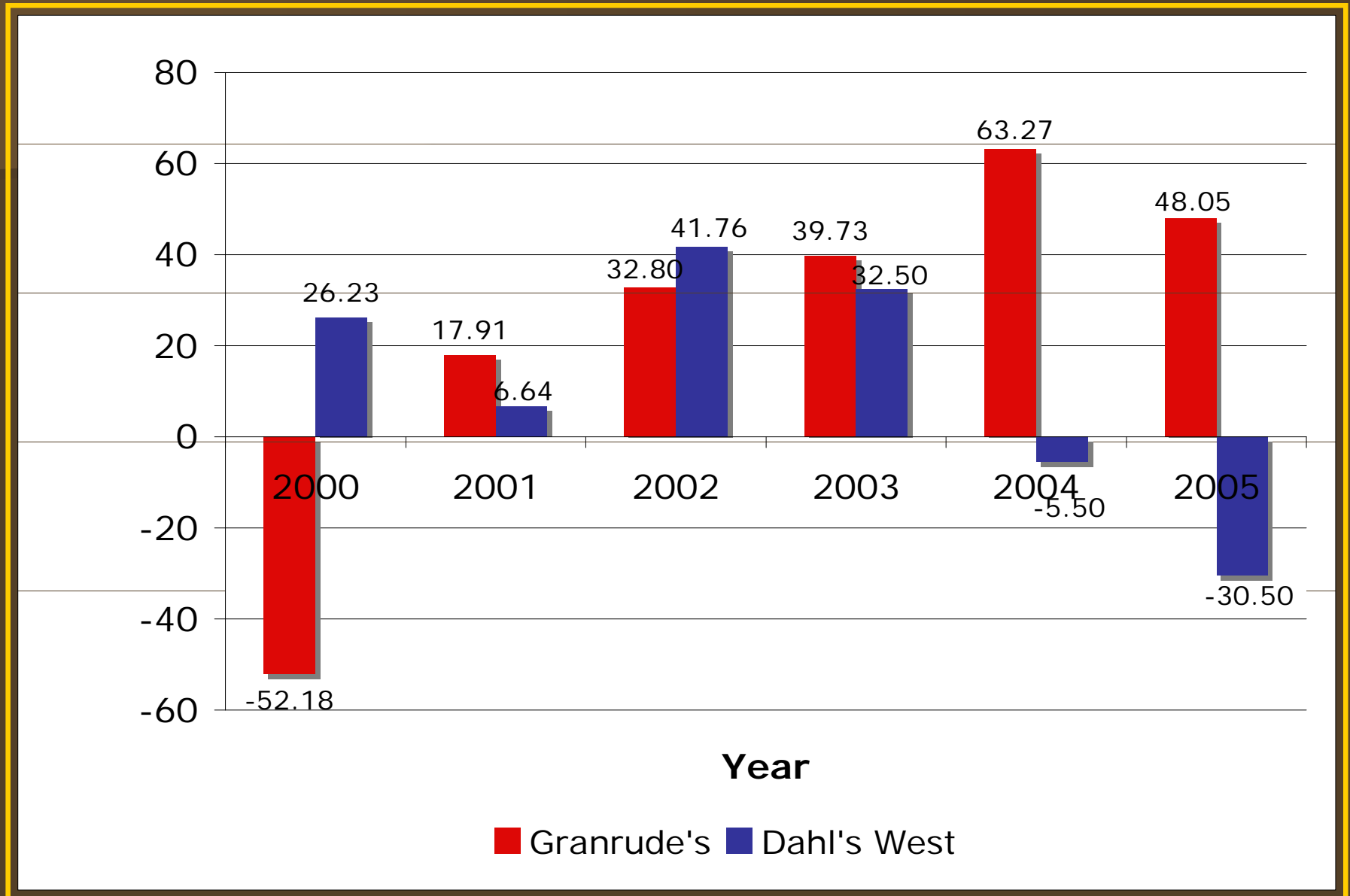
# Granrude's 6-Year Summary



# Dahl's West 6-Year Summary



# Net Returns per Acre, 2001-2005



# Summary

- Granrude's generated positive returns 5 out of 6 years examined
- Production from Granrude's less operating expenses has left enough return to cover all infrastructure costs
- 6 years of data has been collected; Granrude's average net return \$13 more per acre than Dahl's West
- In 2005, Granrude's net return \$78.55/ac higher



# Summary

- Best use for Granrude's
  - Another 1/4 sown to grass in 2006
- Either scenario can pay off under the right conditions
- The beef-crop profit outlook is always changing



For more go to:  
[www.wbdc.sk.ca](http://www.wbdc.sk.ca)  
"Grain to Grass"

Any Questions?