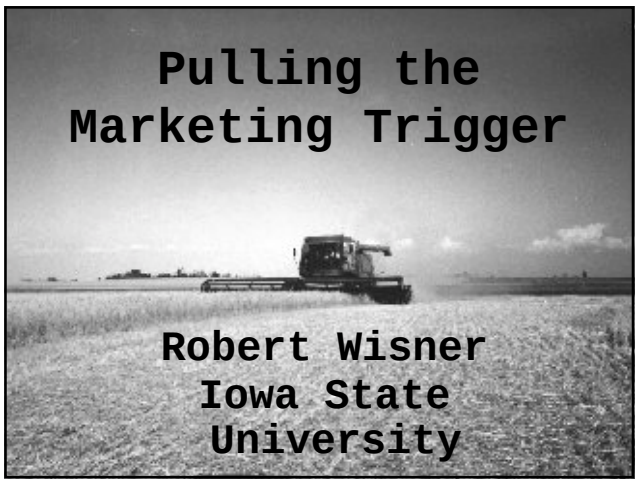


Why Marketing is Critical

- Typical Corn Net Profit Margin, Past Years: $.30/bu.
- $.10 increase in Price = 33% increase in Net Returns
- Also Works in Reverse
- 2000 wheat:$20,000 gain/ 1,500A.

Why Pulling the Marketing Trigger is So Hard

- **Emotions**
- **The price isn't high enough**
- **Possible higher prices**
- ***Don't know what price they need***
- **Don't need the money yet (*tax management & cash-flow needs*)**
- **Yield uncertainty: can't sell until its harvested**
- **Have storage & should use it**

Principles for Pulling the Marketing Trigger

- **Know <u>your</u> costs & risk-bearing ability**
- **Know your needed minimum prices/bu.**
- **Know risks of various strategies (Pre & post harvest)**
- **Be knowledgeable about available marketing tools:**
  - **Offer contracts**
  - **Options**
  - **Revenue insurance**
  - **Minimum price contracts**
  - **Hedging + Market-if-touched orders**

Principles for Pulling the Marketing Trigger II

- **Develop your marketing plan early**
- **How early? Well before planting**
- **Preferably right after you finish income taxes**
- **Involve your spouse**
- **Charting role?**

Today's Risk Environment

- **Freedom to Farm**
- **Low World Grain Reserves**
- **Emphasis on Trade Access**
- **Newer Risk-Management Tools**
- **Uncertain Govt. Support: $1.23/bu.**
- **Increased Insurance Subsidies**
- **LDP Management is Critical**

LDP: A Clearance Sale Tool

- **Corn, % of 1999 crop with LDP taken 77**
- **Soybeans, % with LDP taken 88**
- **Wheat, % (2000) with LDP taken 83**

- **2000 crop through Feb. 21, 01: U.S. wheat 79%, corn 75%, soybeans 83%**
- ***Montana Wheat 87% @ avg. of $0.57/bu.***

Cash-Flow Costs/A	Owners	Renter	Crop-share	Buyers
Seed, fertilizer, pestic.	$110	$110	$55	$110
Insurance, interest, misc.	20	27	15	30
Fuel and repairs	20	20	20	20
Drying	14	14	7	14
Custom hire and labor hire	10	10	10	10
Rent and real estate taxes	21	120	0	79
Fixed debt payments	0	11	11	64
Family living, income tax	69	56	57	50
Total cash flow needs	$264	$368	$175	$377

Cash Flow Risk Ratio for Corn

	Owners	*Renter*	*Crop Share*	*Buyer*
Cash flow cost per acre	**$289**	**$393**	**$187**	**$402**
FAIR & LDP payments?	**-$90**	**-$90**	**-$45**	**-$90**
Cash needed from sales	**$199**	**$303**	**$142**	**$312**
Expected or actual yield (bu.)	**135**	**135**	**67.5**	**135**
Cash cost breakeven price	**$1.47**	**$2.24**	**$2.10**	**$2.31**
Hedged market price ($/bu)	**$2.15**	**$2.15**	**$2.15**	**$2.15**
Cash flow risk ratio	**68%**	**104%**	**98%**	**107%**

Cash flow R. R., $1.50 price?

Net Worth Risk Ratio

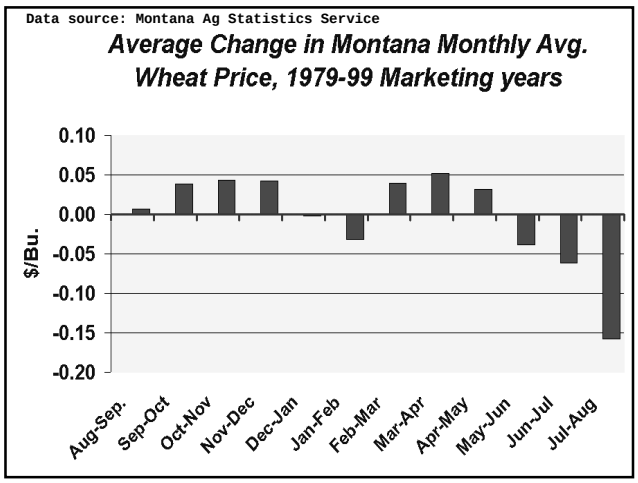
	Owners	Renters	Crop-share	Buyers
000 $ assets	**$1,479.6**	**$293.8**	**$194.6**	**$792.6**
000 $ liabilities	**$0**	**$149.8**	**$52.0**	**$529.5**
000 Net worth	**$1,479.6**	**$144.0**	**$142.5**	**$263.1**
Net worth risked (10%)	**147,958**	**14,404**	**4,251**	**26,312**
Crop acres	**600**	**600**	**600**	**600**
Net worth risk ratio	**$247**	**$24**	**$24**	**$44**

Max. Loss/bu. , norm yld.?

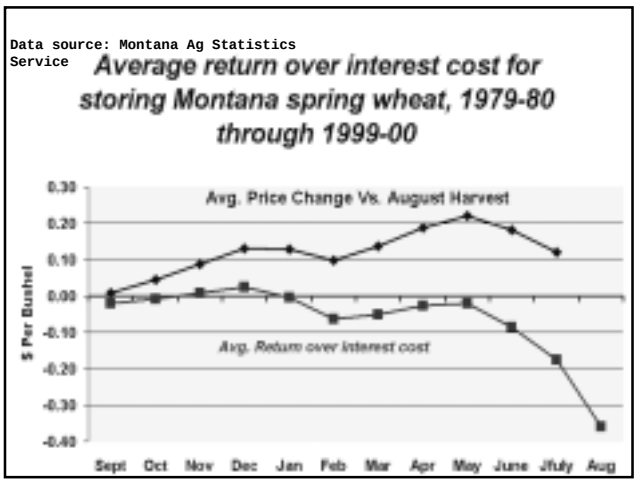
18-24 MONTHS TO MARKET CROPS

- **Pre-planting (Consider price level, yield risk, and insurance tools)**
- **Planting and post-planting**
- **Harvest sales**
- **Post-harvest marketing**

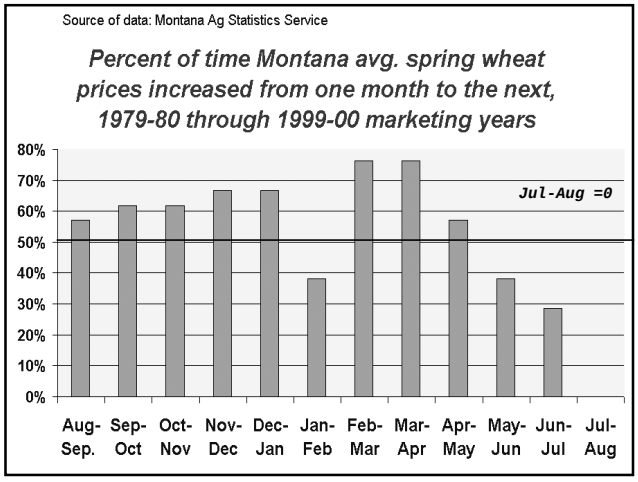
Data source: Montana Ag Statistics Service

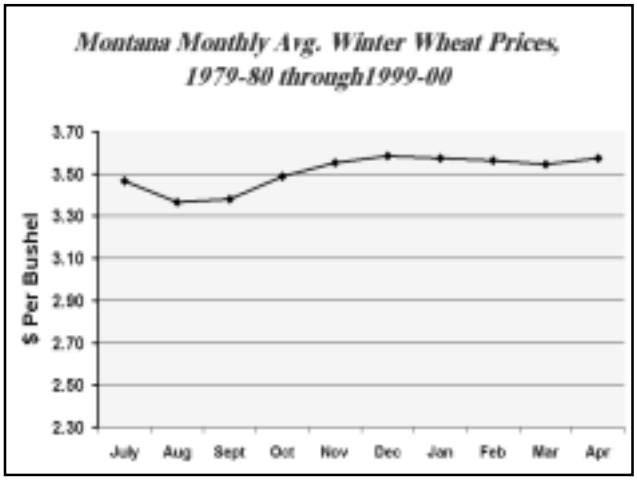


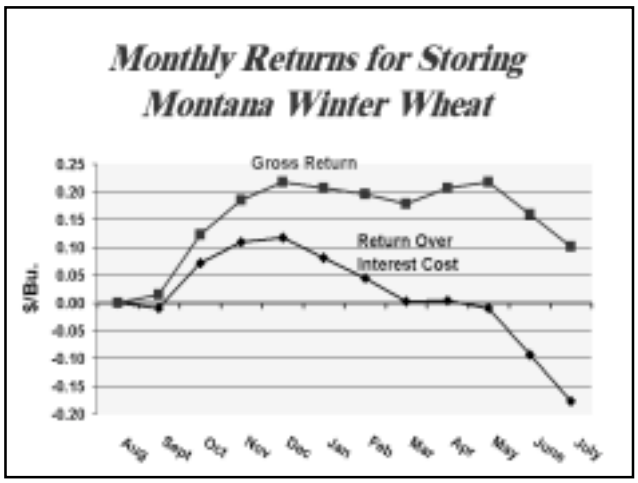
Data source: Montana Ag Statistics Service

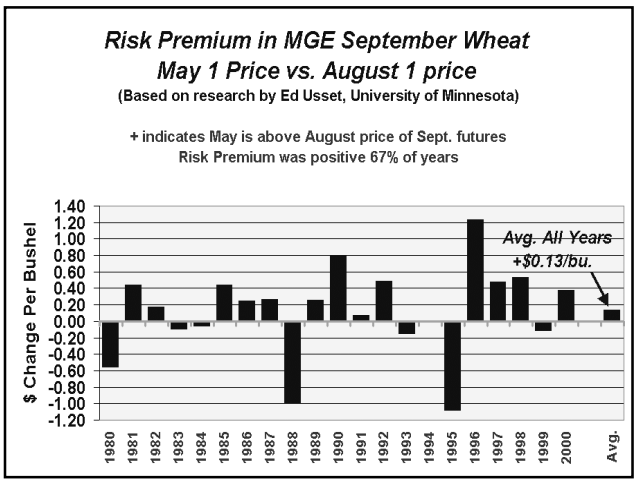


Source of data: Montana Ag Statistics Service









September Spring Wheat at the MGEX

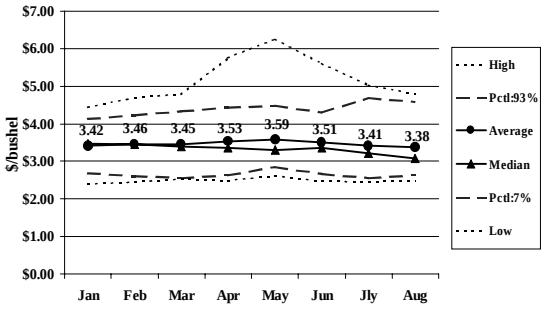
Year	1-May	1-Aug	$/Bu Change
1980	4.13	4.68	0.55
1981	4.65	4.21	(0.44)
1982	4.05	3.88	(0.17)
1983	4.00	4.08	0.09
1984	3.90	3.96	0.06
1985	3.63	3.19	(0.44)
1986	2.92	2.68	(0.25)
1987	2.87	2.60	(0.27)
1988	3.13	4.12	0.99
1989	4.19	3.93	0.26
1990	3.61	2.81	(0.80)
1991	2.95	2.88	(0.07)
1992	3.55	3.06	(0.49)
1993	2.99	3.15	0.15
1994	3.34	3.34	-
1995	3.65	4.73	1.08
1996	5.93	4.70	(1.23)
1997	4.39	3.92	(0.48)
1998	3.61	3.08	(0.53)
1999	3.33	3.44	0.11
2000	3.35	2.97	(0.38)
Avg	3.72	3.59	(0.13)

14 years (67%) market declined an avg of 41cents/bu

7 years (33%) market improved an avg of 43 cents/bu

Source: Ed Usset, University of Minnesota – Feb 2001

Source: Dr. Dan O'Brien, Kansas State Univ., Colby, KS.



Years After 1982 when May Wheat was greater than $4.00 at harvest

Year	15-Aug	15-Apr	Change
1982	4.68	4.08	(0.60)
1984	4.34	4.10	(0.24)
1985	4.05	3.73	(0.32)
1989	4.14	4.20	0.06
1990	4.14	3.73	(0.42)
1996	4.32	5.74	1.42
1997	4.53	4.45	(0.08)
Avg	4.31	4.29	(0.02)

Five of seven years since May prices declined an average of 2 cents/bushel

Source: Ed Usset, University of Minnesota

May Wheat at the MGEX Years after 1982 when May Wheat was less than $3.30 at harvest

Year	15-Aug	15-Apr	Change
1986	3.27	3.32	0.05
1987	2.74	2.79	0.04
1988	2.84	3.07	0.23
1991	3.13	2.87	(0.25)
1992	3.09	3.80	0.72
1993	3.18	3.32	0.14
1994	3.15	3.43	0.28
2001	3.29	?	?
Avg	3.06	3.23	0.17

Six of seven years (86%) the May

Ed Usset, University of Minnesota January 2001

Offer Contracts for Grain Marketing

- **Purposes**
  - **Help take the emotion out of selling**
  - **Implement or start a marketing plan**
  - **Help achieve price goals**
  - **Procedure: do financial homework, then contract with elevator to sell X amount at a specific price (Instruction: just sell if reached)**
  - **May help capture price goals in volatile market**
  - **Users: would not have pulled the trigger**

Offer Contracts, Cont.

- **Contract Details: vary with elevator, typically include:**
  - **Grade requirements**
  - **Quality discounts/premiums**
  - **Delivery time & place**
  - **Provisions if producer fails to deliver**
  - **Quantity to be sold and price**
  - **May let you attach a time deadline.**
  - ***If not available at your elevator,visit with manager about possibility of offering it***

Offer Contracts, Cont.

- Can use a similar approach if you hedge or use the options markets
- Traders call this a "Market if touched" order
- Can use several of these to spread out marketings

NEW TOOLS: WHY INSURANCE IS IMPORTANT WITH PRE-HARVEST PRICING

- **Worst-case: *over-sold, with high prices***
- **Few bushels means high cost/bu.**
- **High price means loss from buying back contract**
- **Insurance that fits with forward sales: *CRC or RA with harvest-price Option***

REVENUE INSURANCE BASICS

- **Corn, soybeans: *Minimum Revenue* is % of Historical Yield x Feb. Avg. of New-Crop Price, Spring Wheat = Sept. fut.**
- **CRC Coverage increases *if Harvest Futures are Above Feb. Avg.***
- **RA has this feature as an Option, IP doesn't have this feature**
- **Result: provides *replacement value on lost bushels***
- **Can be very important for pre-harvest pricing**

CRC EXAMPLE: 2000

- **Feb. avg. price of Sept. wheat, $3.34**
- **Farm APH yield: 36 bu./a.**
- **Insurance @ 70%: 36x .7 = 25 bu./a.**
- **25x $3.34 = $83.50/a. gross revenue**
- **Actual yield and price: 30 bu. & $2.79**
- **Actual insured income: $83.70/a.**

FORWARD PRICING LOW YIELD, NO INSURANCE

- **Pricing 25 Bu./a. @ $3.00 local pre-harvest price (futures $3.50)**
- **Actual yield, 10 bu./a., over-sold by 15 bu.**
- **Harvest price @ $3.50 (Sept. Fut. $4.00)**
- **Buy-back cost on contract: 15 bu./a. x $.50 = $7.50 per acre loss on contract**

FORWARD PRICING, LOW YIELD, AND NO INSURANCE

- **Gross income *before production costs*:**

15 Bu./A. x $0.50 contract buy-back cost -$7.50

10 Bu./A. x $3.00 = 30.00
Combined total 22.50

Less Production cost -88.00

Amount needed from other sources

PRE-HARVEST CONTRACT WITH CRC, Low Yield/High Price

- **Min. income: 25bu./a. X $3.34 =$83.50/a.**
- **Actual insurance income: 10 bu. x $4.00 = $40/a.**
- **Effective insurance: $4.00x25 bu./a. =$100/a.**
- **Indemn. payment: $100-40 = $60/a.**
- **Buy-back cost on contract = $7.50/a.**
- **Net indemnity payment: $52.50/A.**
- **Net Indemnity Pmt. without harvest price: $36/a.**

GROSS INCOME RESULTS

- **With no insurance:**

  10 x $3.00 - $7.50 = $22.50/a.

- **With CRC:**

  10 x $3.00 + $52.50 = $82.50/A.

- **RA Without harvest insurance protection:**

  10 x $3.00 + $36 = $66/a.

  Insured Difference = $16.50/a.

PRE-HARVEST CONTRACT WITH & W/O CRC, return over cost

- **With CRC (Assumed production cost = $88/A) :**
  $52.50/A. + ($3.00x10 bu.)-$88 cost = -$5.50/A.
  Amount needed from other sources: 0.55/Bu.
- **Without harvest price alternative:**
  $36/A. + ($3.00x10 bu.)-$88 cost = -$22/A.
  Amount needed from other sources: 2.20/Bu.
- **With no insurance:**
  Amount needed from other sources: 6.55/Bu
- **FSA Payments, 2000:**
  LDP: Mid-August 2000 $0.55/Bu.
  Other FSA/Bu of actual prod'n 3.39/Bu.
  Total (per bu. @ 10 bu./A.) 3.94/Bu.

PRE-HARVEST CONTRACT WITH & W/O CRC, Net return @ $88/Acre production cost + Govt. Pmts.

	Per Bu .	For 1,500 A.
• CRC & Contract	$3.39	$50,850
• RA, spring price, Cr.	1.74	26,100
• No insurance, contr	-2.61	-39,150
• No insurance, no Cr.	-0.86	-12,900

Conclusions:

- ***If you forward price before harvest, strongly consider CRC to increase your marketing confidence.***
- **Forward pricing won't pay every year**

INCOME RESULTS, ZERO YIELD, BEFORE COSTS & GOVT. PMTS.

- **With no insurance:**

  -$12.50/A. (Before deducting any costs)
- **With CRC:**

  $82.50(-$12.50 contract buy-back) = $70/a.
- **Without harvest insurance protection:**

  $66 - ($12.50 contract buy-back) = $53.50/a.

  Insurance Difference = $16.50/a.

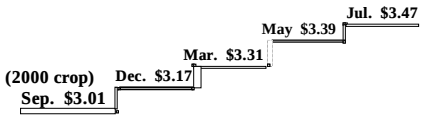
Net Income results for 1,500 acres, zero yield, 25 bu. Contracted, $88/A. cost & 2000 Govt. Payments

- No Insurance -$99,900
- Spring Price RA +$17,850
- CRC +$23,850

CORN PUT OPTIONS PURCHASES AND NO INSURANCE

- **Pricing 100 Bu./a. @ $2.50 pre-harvest put bought at $0.16/bu.**
- **Actual yield, 55 bu./a., over-committed by 45 bu.**
- **Harvest price @ $3.00 (Dec. Fut. $3.30)**
- **Put is worthless. Cost on 45 bu./a. x $0.16 = $7.20 per acre (600 A. = $4,320 + brokerage)**
- **Cost doesn't change with price. *Could cover with APH***

Market Closes September 9, 2000
MGE Spring Wheat Carrying Charges

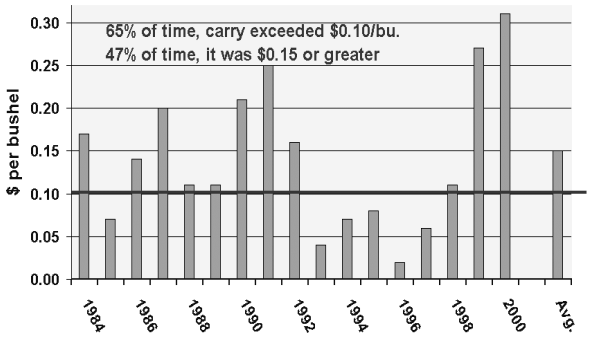


Source: Edward C. Usset
University of Minnesota

Carry (Sept.-March Spread) in MGE Spring Wheat

Data source: Ed Usset
U. of Minn.

What is a good carry?



The carry from September to March was 30 cents. Was that a "large" carry?

September/March Carrying Charges

Year	Sep 15-Aug	Mar 15-Aug	Carry
1984	3.84	4.01	0.17
1985	3.29	3.36	0.07
1986	2.64	2.77	0.14
1987	2.67	2.87	0.20
1988	4.16	4.27	0.11
1989	4.04	4.15	0.11
1990	2.83	3.04	0.21
1991	2.83	3.08	0.25
1992	2.99	3.16	0.16
1993	3.22	3.27	0.04
1994	3.56	3.63	0.07
1995	4.44	4.52	0.08
1996	4.62	4.64	0.02
1997	3.89	3.96	0.06
1998	3.32	3.43	0.11
1999	3.36	3.62	0.27
2000	2.90	3.21	0.31
Average	3.59	3.74	0.15

Ed Usset
U. of Minn.

Years with less than 6 cents carry (<1 cent/month): 2
Years with 6-24 cents carry (1– 4 cents/month): 12
Years with more than 24 cents carry (> 4 cent/month): 3

Key Strategies

- **Know your financial needs & costs**
- **Organize your marketing**
- **Use a plan-ahead Marketing strategy**
- **Consider all alternatives**
- ***Consider "Offer" contracts to help pull the trigger***
- **Plan to sell old-crop before everyone else needs cash**
- ***Consider pre-harvest sales + CRC***