

Grain Marketing Tips

(from my best friends)

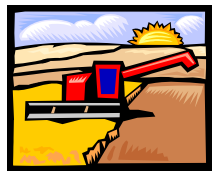


MINNESOTA ASSOCIATION
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pre-harvest



post-harvest



Edward Usset

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Corn & Soybean Digest columnist
Center for Farm Financial Management www.cffm.umn.edu



Grain Marketing Tips

(from my best friends)

- ✓ Barney Binless – Start with a benchmark.
- ✓ Grandma – Keep it simple.
- ✓ Peter Paperfarmer – Do options add value?
- ✓ Earl Eitheror – Carrying charges rule!
- ✓ May Sellers – Have an exit plan!
- ✓ Hank Holder – Don't store grain too long.



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Grain Marketing Tips

(from my best friends)

A word on methodology...

- ✓ Look for strong tendencies (nothing is 100%)
- ✓ Avoid extraordinary years (average)
- ✓ When comparing strategies, focus on the frequency of large differences (>10%)



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Barney Binless

Start with a benchmark.



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Barney Binless

Barney has no storage and no interest in early pricing. He sells at harvest, and his harvest price is our benchmark for comparisons.



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Barney Binless

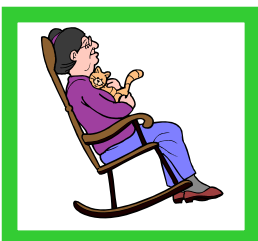
Corn: Harvest is the Friday between October 12-18

Soybeans: Harvest is the Friday between **October 5-11**

HRS wheat: Harvest is the Friday between August 20-26



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before harvest...

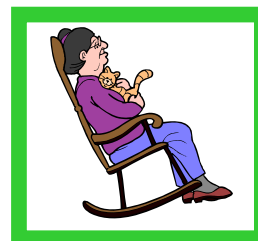


Grandma

Keep it simple



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before harvest...

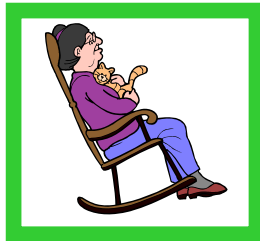


Grandma

Grandma likes a simple marketing plan, pricing 10% of her new crop grain each month from January thru July – 70% of her expected crop. She takes action regardless of “low” prices.



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before harvest...



Grandma

Corn, soybeans and HRS wheat: Grandma sells new crop futures (Dec corn, Nov soybeans or Sep wheat) on the Tuesday between the 4th and the 10th of each month, January through July.



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Grandma vs. Barney, 1990-2018

Corn



	Grandma	Barney
All years	2.93	2.79
Years > Barney	20 (69%)	
Years >10% margin	16	4

before harvest...



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Grandma vs. Barney, 1990-2018

Soybeans



	Grandma	Barney
All years	7.26	7.04
Years > Barney	20 (69%)	
Years >10% margin	8	5

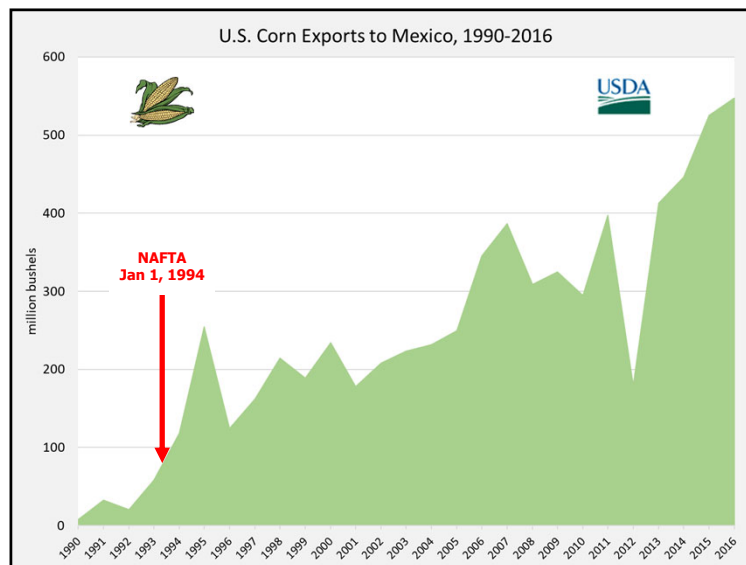
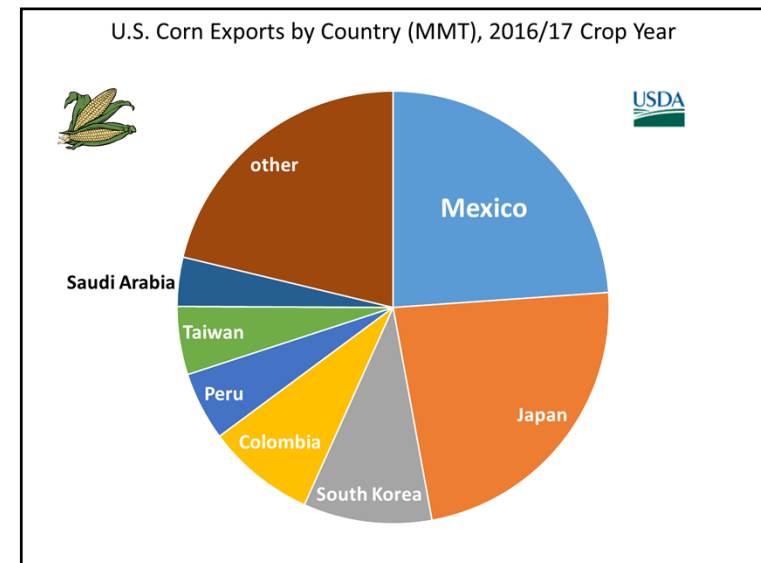
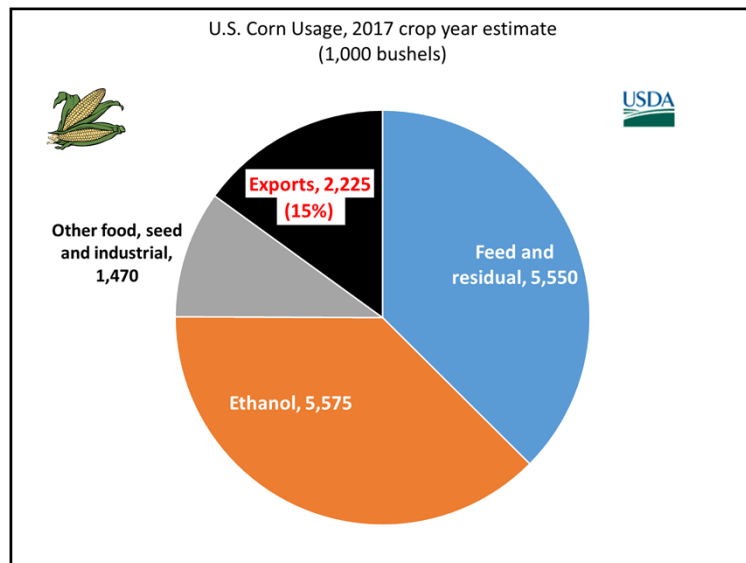
before harvest...



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Quiz Time!

Are exports important to the corn market?



after harvest...

Peter Paperfarmer

Do options add value?

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after harvest...



Peter Paperfarmer

Like Barney, Peter has no storage. Each year, he "re-owns" harvest sales with call options. He gets the harvest price each year, plus any profit or loss from buying at-the-money call options at harvest and holding to expiration.



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after harvest...



Peter Paperfarmer

Corn and soybeans: Peter sells corn on the Friday between October 12-18 (October 5-11 soybeans), and buys an at-the-money July call options on November 1. July options expire between June 20-26.

HRS wheat: Peter sells wheat on the Friday between August 20-26, and buys an at-the-money May call options on September 1. May options expire between April 20-26.



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Peter vs. Barney, 1990-2017



Corn



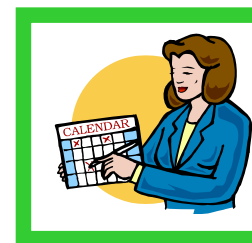
	Peter	Barney
All years	2.72	2.78
 2.59	2.59	2.74
Years \geq Barney	3 (11%)	
Years $>10\%$ margin	3	10

Outlier corn years: 2008 (Barney), 2007 (Peter)
Conclusions for corn also apply to HRS wheat, but his performance in soybeans has been impressive.



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Terry Timer



Terry knows that seasonal highs in new crop futures often occur in the spring. She uses decision dates to price 25% increments in March, April and May, if prices are above production costs.



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before harvest...



Peter Paperfarmer

Peter mimics Terry in early sales, but re-owns each sale with call options. He gets the benefit of early pricing, plus the profit or loss from buying ATM Dec corn and Nov soy calls and holding to September 15 (mid-August for Sep wheat calls).



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Peter vs. Barney vs. Terry, 1990-2018



Corn

	Peter	Barney	Terry
21 yrs>min	3.04		3.12
	3.12		3.19
Years > Barney	12(57%)		15(71%)
Years >10% margin	7		11

Outlier corn years: 2006 (Barney), 2004 (Peter)
Conclusions for corn also apply to HRS wheat, but his performance in soybeans has been impressive.



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Peter vs. Barney vs. Terry, 1990-2018



Corn

	Peter	Barney	Terry
21 yrs>min	3.04	2.95	3.12
	3.12	3.02	3.19
Years > Barney	12(57%)		15(71%)
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Outlier corn years: 2006 (Barney), 2004 (Peter)
Conclusions for corn also apply to HRS wheat, but his performance in soybeans has been impressive.



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Quiz Time!

How often would you expect to profit from a simple strategy of buying at-the money calls and holding them to expiration?

- A. 10% of the time
- B. 25%
- C. 33%
- D. 50%



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Quiz Time!

How often would you expect to profit from a simple strategy of buying at-the money calls and holding them to expiration?

- A. 10% of the time
- B. 25%**
- C. 33%
- D. 50%



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How often does Peter profit with options?



	Before harvest*	After harvest
Corn	4/21 years (19%)	3/28 years (11%)
Soybeans	5/23 years (22%)	13/28 years (46%)
HRS Wheat	4/21 years (19%)	7/28 years (25%)

* Before harvest, only years when Peter made pre-harvest sales



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Quiz Time!

Since 1990, how often has Peter Paperfarmer profited from the purchase of ATM calls, before and after harvest?



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Quiz Time!

Since 1990, how often has Peter Paperfarmer profited from the purchase of ATM calls, before and after harvest?

Peter profited 36 times in 149 tries (65 attempts before harvest and 84 attempts after harvest, or **24%** of the time.



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Peter Paperfarmer

Do options add value?

At best, the record is mixed with call options.



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Grain Marketing is Simple*

*it's just not easy

2nd Edition



Edward Usset

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Grain Marketing is Simple*

*it's just not easy

2nd Edition



Edward Usset

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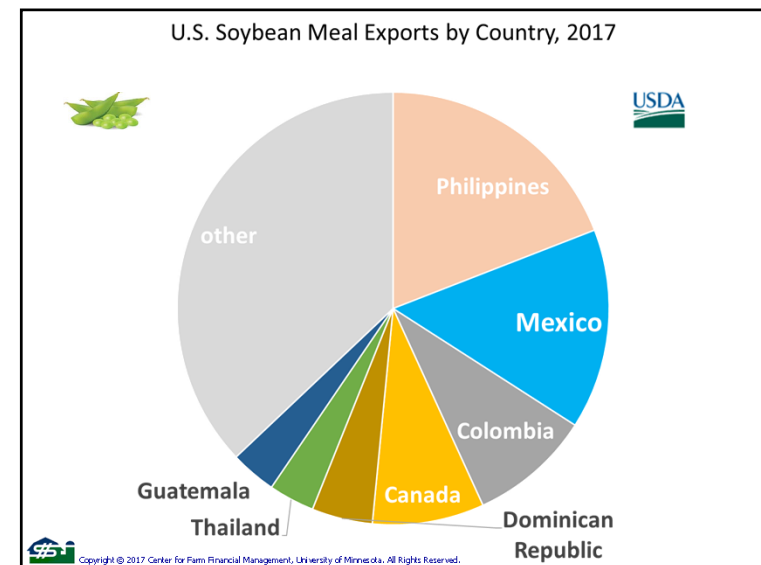
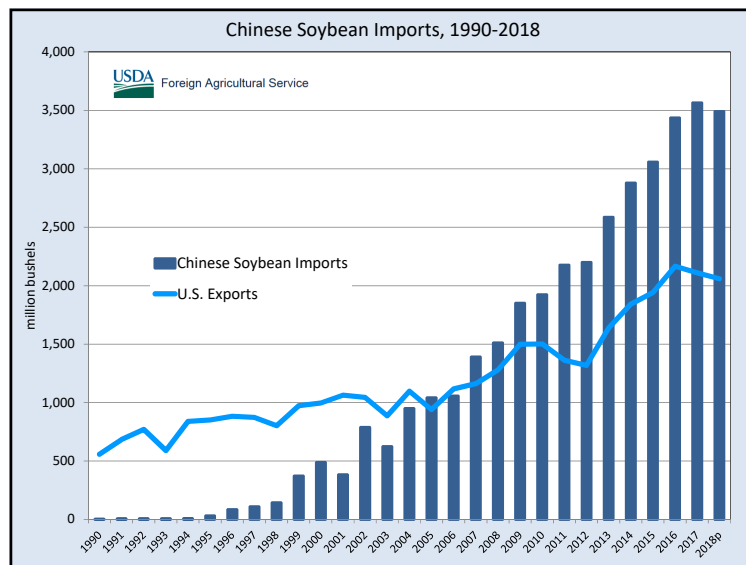
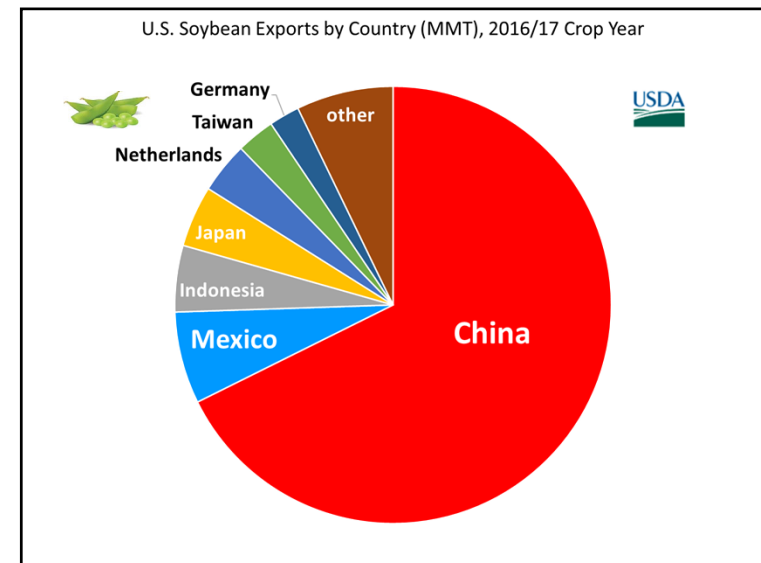
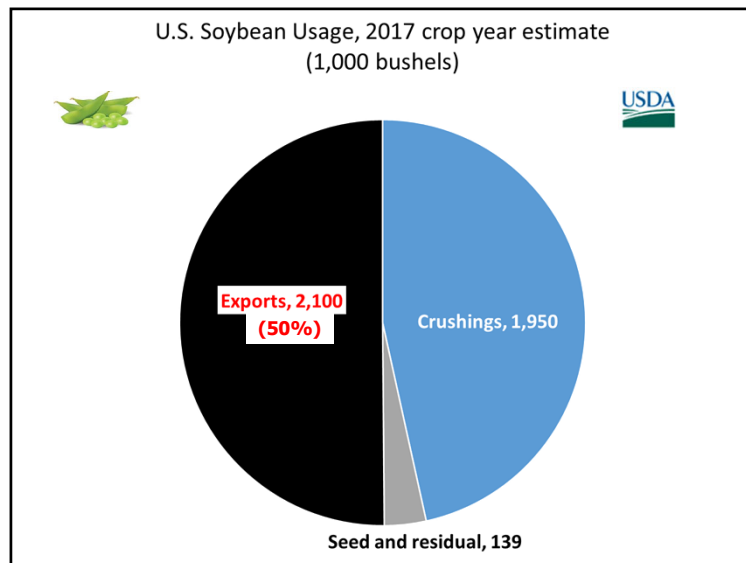
at checkout
(note **ALL CAPS**)

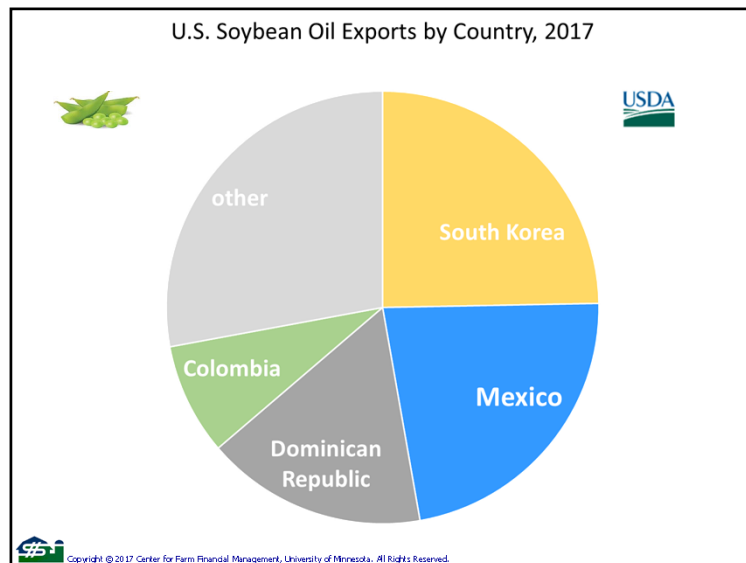

Quiz Time!

Does the U.S. export many soybeans?



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Earl Eitheror

Carrying charges rule!

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Earl Eitheror

Earl has on-farm storage. He either sells the carry when carrying charges are large, or he holds his crop in the bin to sell later when the carry is small. Variable storage costs (interest and shrink) are taken into account.

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Carrying Charges

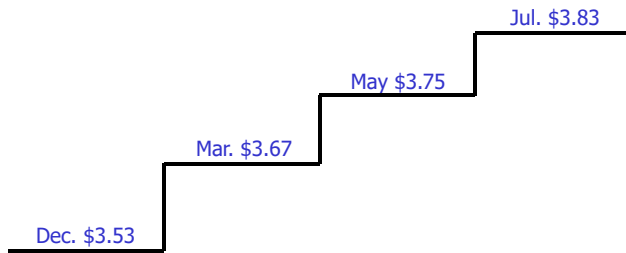
If you want to “sell the carry”, you must first understand carry. What are carrying charges?

- ✓ The price differences between futures delivery months (e.g. December and July corn, November and May soybeans, etc.)
- ✓ They speak directly to a critical question in grain markets: To store or not to store?
- ✓ Let’s explore carrying charges in storable commodities...

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Carrying Charges

CBOT corn futures: October 13, 2017



Carrying charges are *market determined* storage costs.
large crops – large stocks – large (and positive) carrying charges

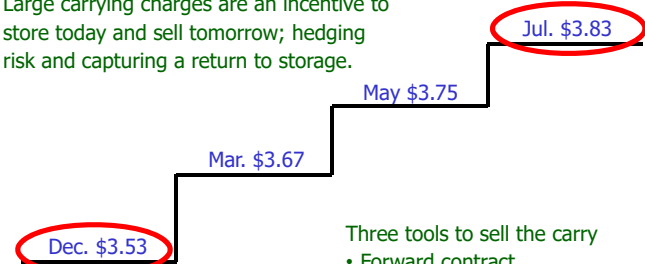


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Carrying Charges

CBOT corn futures: October 13, 2017

Large carrying charges are an incentive to store today and sell tomorrow; hedging risk and capturing a return to storage.



Three tools to sell the carry

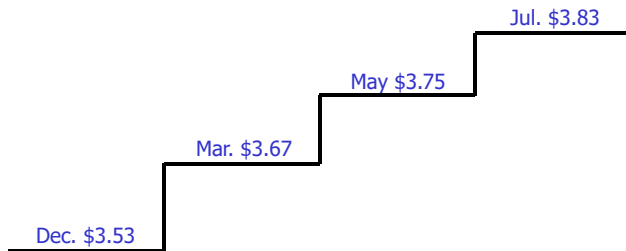
- Forward contract
- Hedge-to-arrive
- Sell futures



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Carrying Charges

CBOT corn futures and Pipestone, MN cash market: October 13, 2017



\$2.86 1. At harvest, place the crop in storage, current basis is 67 cents under the Dec, or 97 cents under the July contract

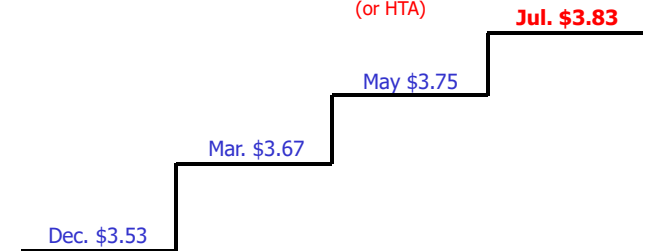


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Carrying Charges

CBOT corn futures and Pipestone, MN cash market: October 13, 2017

2. Sell the carry, selling July futures (or HTA)



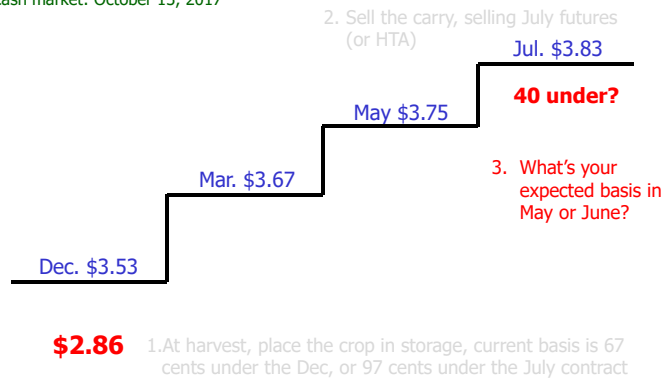
\$2.86 1. At harvest, place the crop in storage, current basis is 67 cents under the Dec, or 97 cents under the July contract



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Carrying Charges

CBOT corn futures and Pipestone, MN
cash market: October 13, 2017



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Carrying Charges

CBOT corn futures and Pipestone, MN
cash market: October 13, 2017



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What is a “large” carry?

- >140% of interest: **large** - sell the carry
- <140% of interest: **small** - don't sell the carry



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Carrying Charges

Step 1: calculate the carrying charge...

carrying charge
_____ cents

Step 2: calculate a per bushel interest cost for grain storage...

cash grain price * interest rate * mos. storage / 12 months

_____ * _____ * _____ / 12 = _____ cents

Step 3: compare the size of the carry to your interest costs...

carrying charge / interest cost

_____ cents / _____ cents = _____ %



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Corn Carrying Charges at Harvest, 2000-2018

CBOT Corn Futures in mid-October

- ✓ 16 years (84%) showed a large carry
- ✓ 3 years showed a small carry (<140%)

Interest cost are based on cash prices and prime rate plus 1%

Year	Dec/Jul (cents)	Int. cost (7 mos.)	Carry % of Int.
2000	25	10	264%
2001	26	6	437%
2002	8	7	107%
2003	14	5	267%
2004	24	6	404%
2005	27	6	424%
2006	19	14	127%
2007	37	17	223%
2008	40	11	348%
2009	29	8	336%
2010	20	12	164%
2011	23	15	157%
2012	(12)	18	NA
2013	28	10	274%
2014	30	7	409%
2015	23	8	278%
2016	22	7	306%
2017	30	9	340%
2018	24	12	203%



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Soybean Carrying Charges at Harvest, 2000-2018

CBOT Soybean Futures in early October

- ✓ Just three years showed a large carry (>140%)

Interest cost are based on cash prices and prime rate plus 1%

Year	Nov/Jul (cents)	Int cost (8 mos.)	Carry % of Int.
2000	35	30	119%
2001	19	17	111%
2002	7	19	38%
2003	(31)	22	-137%
2004	28	19	153%
2005	30	26	117%
2006	41	31	134%
2007	42	51	81%
2008	48	29	162%
2009	(0)	26	-1%
2010	29	29	99%
2011	37	31	121%
2012	(109)	42	-258%
2013	(32)	34	-92%
2014	31	24	129%
2015	20	23	85%
2016	23	25	93%
2017	37	31	119%
2018	50	32	158%



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Wheat Carrying Charges at Harvest, 2000-2018

MGEX Wheat Futures in late August

- ✓ 53% of years showed a large carry (>140%)

Interest cost are based on cash prices and prime rate plus 1%

Year	Sep/Mar (cents)	Int cost (6 mos.)	Carry % of Int.
2000	28	14	203%
2001	28	11	250%
2002	4	11	33%
2003	11	9	125%
2004	15	9	174%
2005	-6	13	-50%
2006	23	19	122%
2007	15	28	54%
2008	31	26	115%
2009	29	11	278%
2010	24	13	181%
2011	-16	19	-87%
2012	20	18	112%
2013	24	14	167%
2014	42	13	329%
2015	33	10	334%
2016	13	9	136%
2017	25	13	184%
2018	33	16	208%



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Carrying Charges

General conclusions about (positive) carrying charges...

1. Common in corn, and often very large
2. Uncommon in soybeans
3. Wheat carries are less consistent, and large in recent years
4. Carrying charges speak to the bullish or bearish tone in the market



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Earl vs. Barney, 1990-2017

Corn



	Earl	Barney
All years	2.93	2.78
	2.74	2.60
Years >= Barney	23 (82%)	
Years >10% margin	8	0

← 15 cents!

Outlier corn years: 2012 (Barney), 1995 (Earl)
Large carrying charges are not common in soybeans.



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Earl vs. Barney, 1990-2017

Wheat



	Earl	Barney
All years	4.76	4.60
	4.54	4.38
Years >= Barney	22 (79%)	
Years >10% margin	5	2

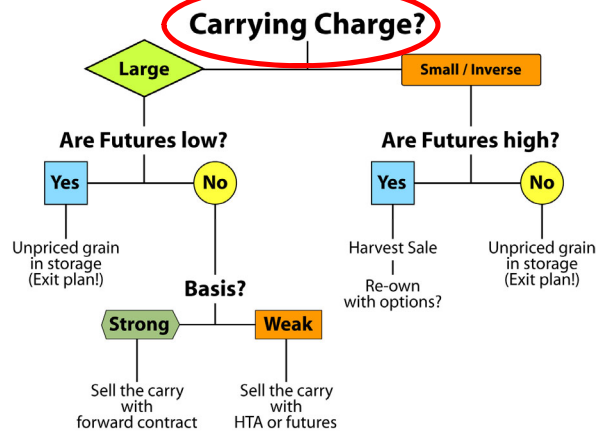
← 16 cents!

Outlier wheat years: 2008 (Barney), 2007 (Earl)



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Decision Tree for Sizing Up the Market



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Earl Eitheror

Carrying charges rule!

2018: carrying charges are large in corn, wheat and soybeans.



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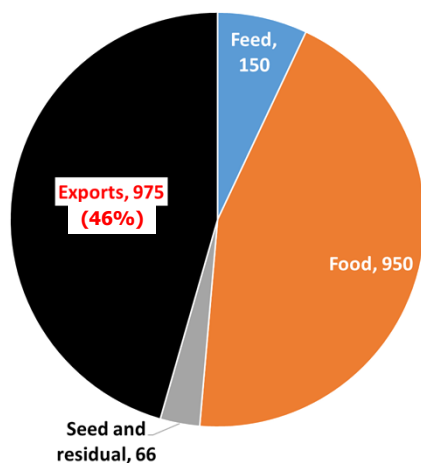


Quiz Time!

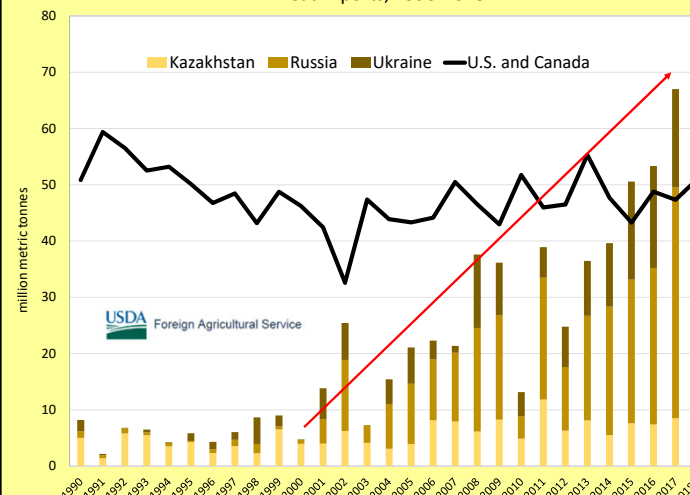
**Wheat acres in the U.S. keep decreasing.
Exports can't be very important... right?**

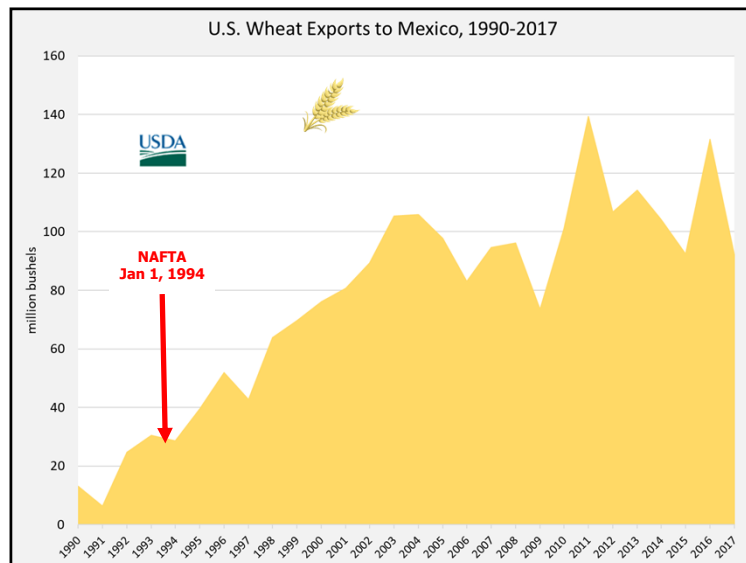
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U.S. Wheat Usage, 2017 crop year estimate
(1,000 bushels)



Wheat Exports, 1990-2018





May Sellers

Have an exit plan!

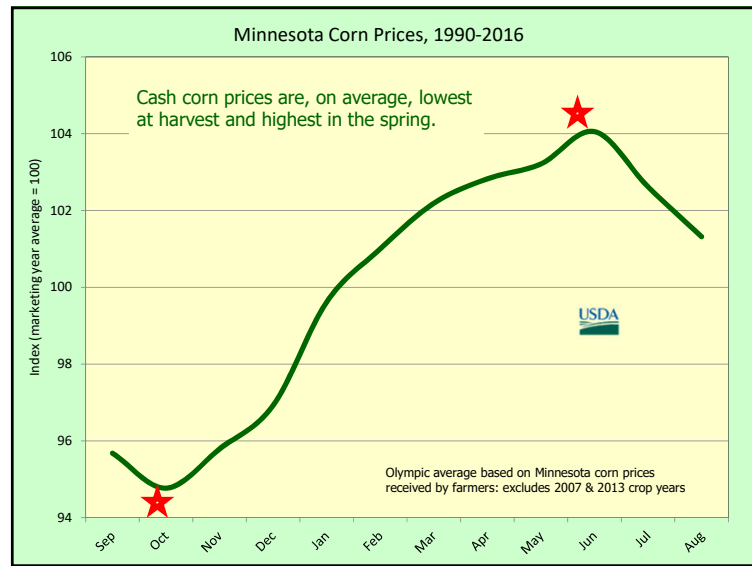
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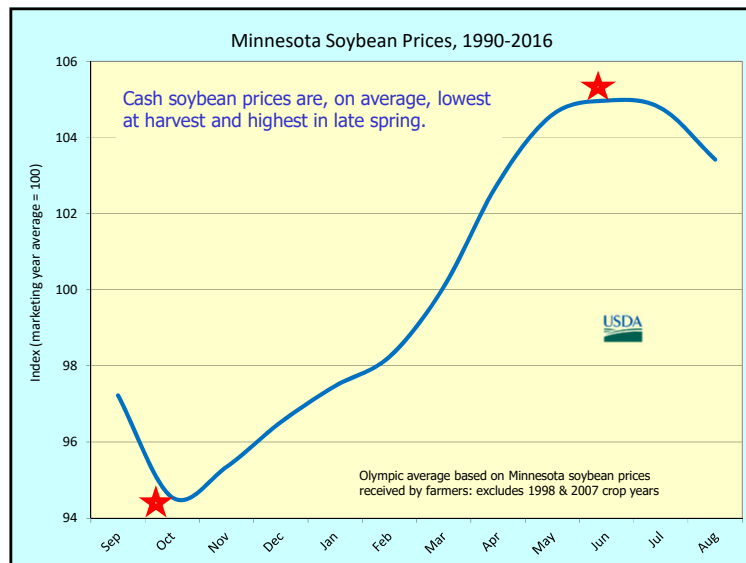

May Sellers

May has on-farm storage. Every year she holds her crop in the bin to sell in late spring. Her price is the cash price in the month of May, less variable storage costs (interest and shrink).

(HRS wheat is sold in late fall, with cash price set in early December)

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May Sellers




Corn and soybeans: Mays stores 80% of her harvested grain until spring, selling on the Friday between May 25-31. 20% is sold at harvest.

HRS wheat: Mays stores 80% of her harvested wheat until late fall, selling on the Friday between December 1-7. 20% is sold at harvest.

May pays variable costs of storage (interest and shrink).

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May vs. Barney, 1990-2017

		
	May	Barney
Corn		
All years	3.00	2.78
	2.96	2.77
Years \geq Barney	18 (64%)	
Years >10% margin	9	3

← 22 cents!

← (but more risk than Earl)

Outlier corn years: 1997 (Barney), 2007 (May)
 Conclusions for corn also apply to soybeans and HRS wheat.

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May Sellers

Have an exit plan!

May has an exit plan. What is your exit plan?

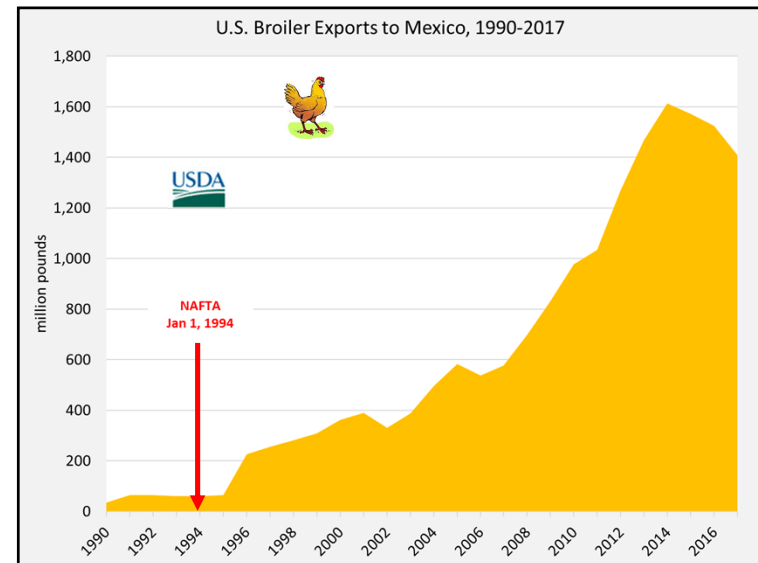
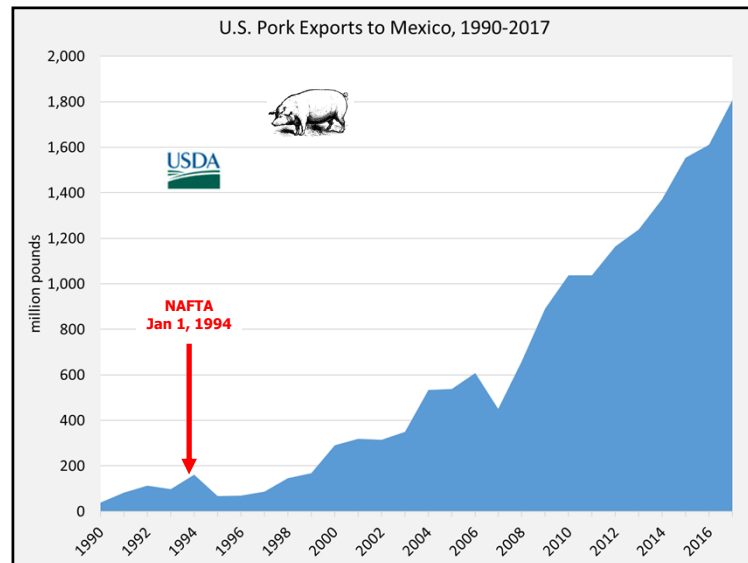
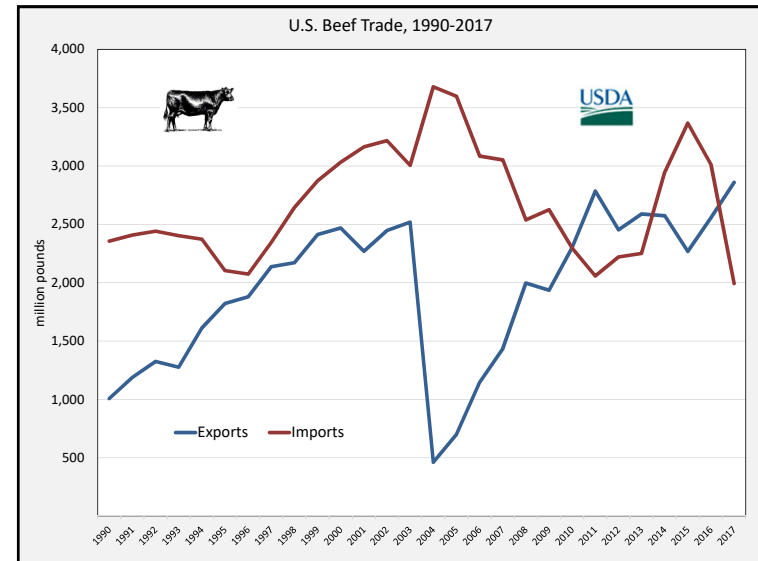
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Quiz Time!

Beef, pork, poultry and dairy?

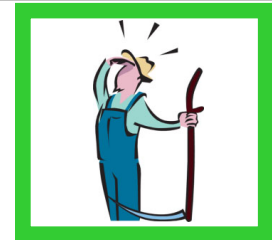


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2016 Annual Export Trade Data		#1 Market?
Total value of U.S. dairy exports		\$4.8 billion
U.S. nonfat dry milk exported	57%	
U.S. butterfat exported	2.8%	
U.S. cheese exported	5.2%	
U.S. dry whey exported	44%	

Hank Holder



Don't store grain too long.

Hank Holder



Hank is our perennial bull, always convinced that prices are about to surge higher. But Hank only has enough storage for one crop, so each year he is forced to sell his last crop before harvest, to make room for the new crop. His price is the following harvest price, less storage costs.

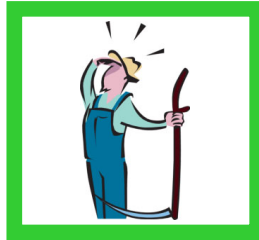
Hank Holder



Corn: Hank sells 20% of his grain at harvest, and stores the remaining 80% until the following harvest, selling on the Friday between October 1-7.

Soybeans: Hank sells 20% of his grain at harvest, and stores the remaining 80% until the following harvest, selling on the Friday between [Sep 28-Oct 4](#).

HRS wheat: Hank sells 20% of his wheat at harvest, and stores the remaining 80% until the following harvest, selling on the Friday between [August 13-19](#).






Barney may be our benchmark, but let's compare Hank Holder to May Sellers – two producers doing the same thing.



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Hank vs. May, 1990-2017

Corn

			
	Hank	May	
All years	2.54	3.00	← 46 cents?
	2.53	3.01	
Years \geq May	8 (30%)		←
Years $>10\%$ margin	4	19	←

Outlier wheat years: 2003 (May), 2009 (Hank)




...and \$1.00 in soybeans!



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Hank vs. May, 1990-2017

Wheat

			
	Hank	May	
All years	4.39	4.73	←
	4.37	4.74	
Years \geq Barney	19 (66%)		
Years $>10\%$ margin	4	17	

Outlier wheat years: 1993 (May), 2016 (Hank)

...and 34 cents in HRS wheat!



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Hank Holder



Hank breaks The 11th Commandment of Grain Marketing:

"Thou shall not hold unpriced corn or soybeans in the bin beyond July 1" (June 1 for wheat)



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Would the "pros" ever ignore the 11th Commandment of Grain Marketing?

August 30, 2017

Advice Alert

Corn and soybean producers: Finish old-crop sales... The 2016-17 marketing year for corn and soybeans ends Aug. 31. While we feel the markets are close to a low in time and price, our policy is to finish old-crop sales by the end of the marketing year. Therefore, we advise corn and soybean producers to sell the final 15% of 2016-crop inventories to get to 100% sold. We'll wait on price recoveries to advance new-crop sales.



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Would the "pros" ever ignore the 11th Commandment of Grain Marketing?

CORN July 7, 2018 • Vol. 46, No. 27

Position Monitor

	'17 crop	'18 crop
Cash-only:	70%	25%
Hedgers (cash sales):	70%	25%
Futures/Options	0%	0%



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CORN September 1, 2018 • Vol. 46, No. 35

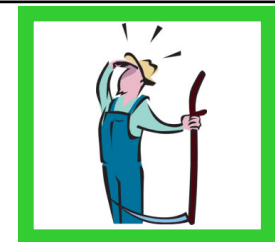
Position Monitor

	'17 crop	'18 crop
Cash-only:	100%	25%
Hedgers (cash sales):	100%	25%
Futures/Options	0%	0%

GAME PLAN: We finished 2017-crop marketings with a 10% cash sale Aug. 30. While the corn market seems poised to put in an early seasonal low, we ran out of time on the 2017-18 marketing year. We are willing to wait for a price recovery before we sell since we feel prices are undervalued given the expected drop in U.S. and global stocks relative to use.

...and they did it again in 2018!

Hank Holder



Don't store grain too long.



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Quiz Time!

My students speak!



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Quiz Time!

"**Professor** Usset is a fantastic teacher. He really cares about his students and is passionate about the subject."



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Quiz Time!

"Edward is a great teacher! If he could **make the final exam easier**, the class would be perfect."



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Quiz Time!

"You are one of the best teachers I ever met in my college life.
Come and party with me."



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Quiz Time!

"The instructor was rather
scatter-brained and confused
about the content."



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Marketing Tips (from my best friends)

	Grandma enjoys solid success with the simplest of marketing plans. Marketing does not need to be complicated.
	Peter Paperfarmer - paper farming with call options has, at best, a mixed record of results (use selectively).
	Earl Eitheror makes a decision based on carrying charges . A solid risk/reward approach.
	May Sellers exit plan is based on seasonal patterns, and it works. What is your exit plan?
	Hank Holder pays a big price for holding grain too long , and disobeying the 11 th Commandment of Grain Marketing.



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Grain Marketing Tips (from my best friends)



MINNESOTA ASSOCIATION
of
AGRICULTURAL EDUCATORS

Thank you!

Edward Usset

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