

A combine harvester is shown in the middle ground, moving through a field of mature, golden-brown corn. The sky is a clear, deep blue with a few wispy white clouds. The foreground is filled with the dense, harvested stalks of the corn crop.

Farmer for the day

Do you have what it takes ?

How did we do?

NC State Farmers

Situation:

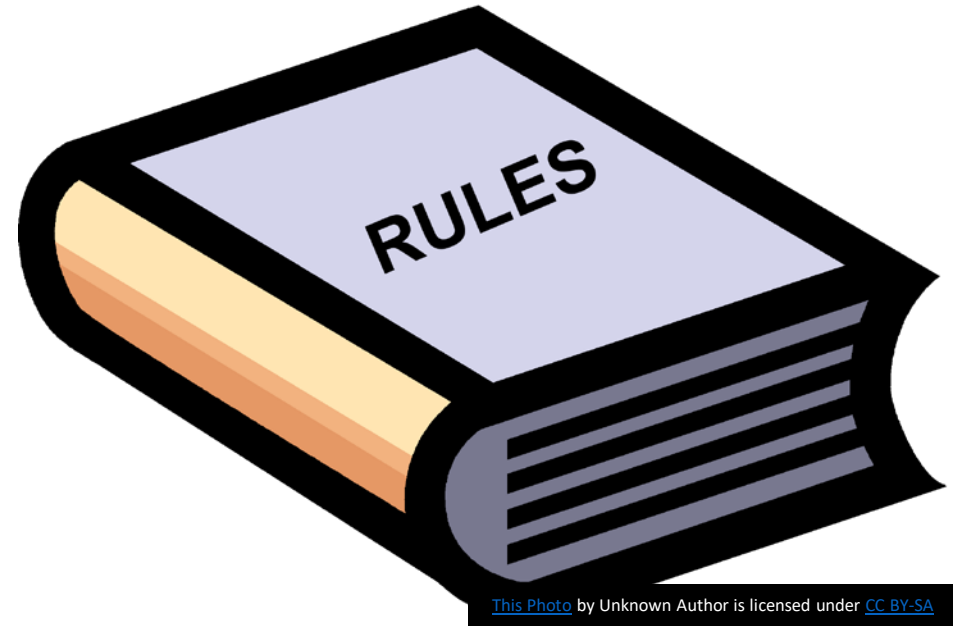
- Grain farmer that grows corn and beans
- Expect to grow 100,000 bushels of corn this year
- Corn cost of production is \$500 per acre or \$4.16 per bushel (based on 120 avg yld)
- Have inputs locked in so you know your cost per acre
- when given a market update you must decide each time
- Put a Name, Date, and Choice on a piece of paper
- Keep a record of your decisions each time

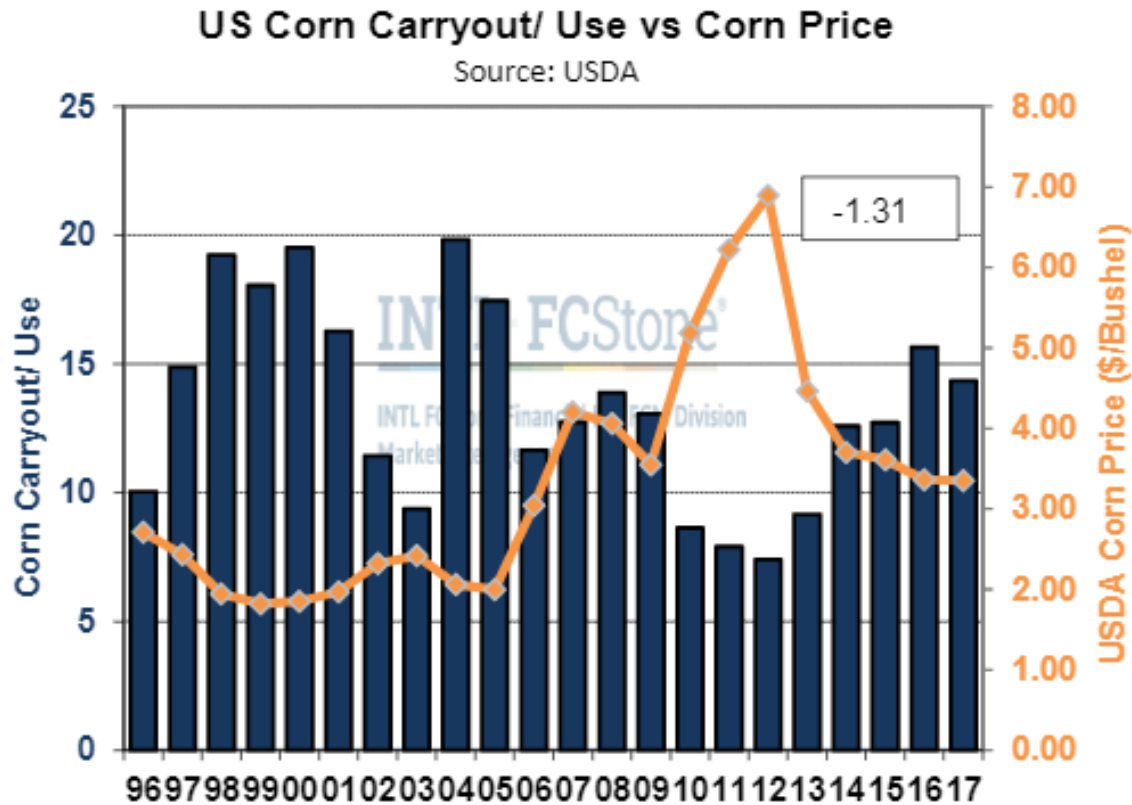
Marketing Options

- **Cash Price:** Lock in price for corn (futures+ basis)
 - Ex. $\$3.90_{\text{cz18}} + \$0.60 = \$4.50$ cash price
- **Basis contract:** Lock in the basis but not the futures prices
 - Ex. $\$4.50$ cash, $\$3.90_{\text{cz18}} = \0.60 Basis
- **HTA:** Lock in the futures but not the basis
 - Ex. $\$4.50$ cash, $+\$0.60$ basis = $\$3.90$ futures
 - The HTA contract is one that offers the seller of grain the ability to lock in the futures market portion on a cash grain contract. The basis portion of the cash grain contract will be locked in at a later date per contract specifications.
 - The buyer of the grain takes the risk on margin calls!

Rules of the Game

- Must have 100% of your crop marketed by the end of the game
- Basis contracts must be priced by the end of the game
- HTA contracts must be marketed to market
 - Need to have a basis set at some point in the game
- Winner will get the grand prize

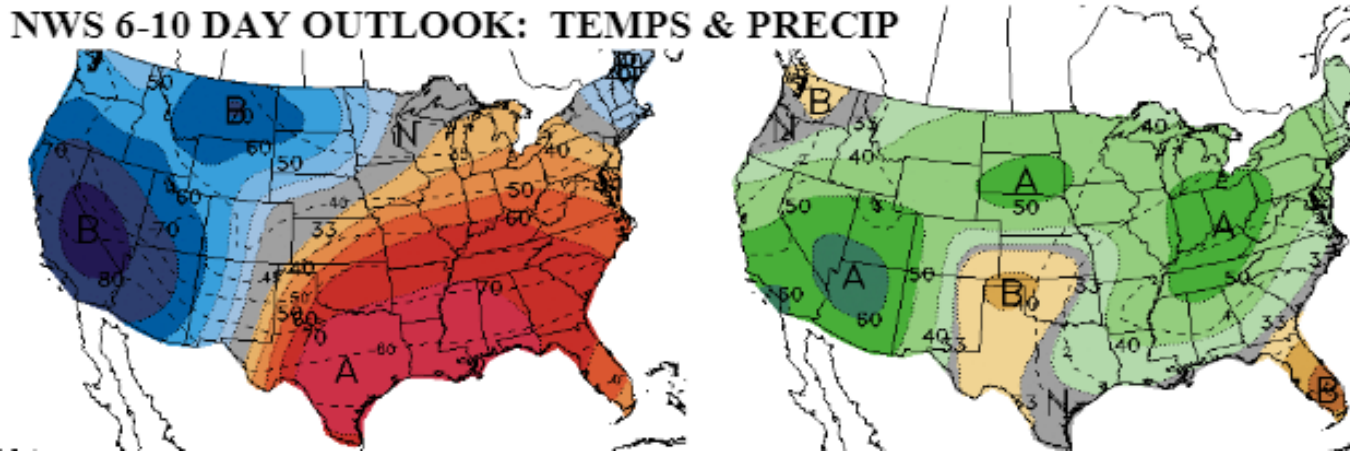




- Your corn is not planted yet
 - USDA report is predicting a big carryout for 2019
 - Funds are record long
 - Just purchased a new farm
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- **Basis = \$0.65**
 - **Futures(cz18)= \$4.08**

Date: March 20th 2018

NWS 6-10 DAY OUTLOOK: TEMPS & PRECIP



- Your corn is all planted into great conditions
- The corn belt had delayed planting
- Brazil had a bad second corn crop
- US exports are bigger than expected
- **Basis= \$0.60**
- **Futures= \$4.25**

Date: May 10th 2018



- Your corn looks good but are worried about hot night temps causing yield lost
- Mexico imposed a 5% tariff on US corn imports
- US corn belt conditions look great

- **Basis= \$0.50**
- **Futures= \$3.98**

Date: June 25th 2018



- The corn looks great but long forecast predicts little to no rain
- Your corn looks great and starting to see some “tip back”
- Oil has rallied to 5 year highs

- **Basis: \$0.55**
- **Futures: \$4.12**

Date: July 15Th 2018



- Your corn crop is a bumper crop
 - North Carolina is going to have a record yield
 - US corn belt will have record crop
 - You are now harvesting your corn
-
- **Basis: \$0.45**
 - **Futures:\$3.87**

Date: August 10th 2018



- You are now done with harvest
- Your operating loan is now due and must market all grain
- South American crop is not looking like it is going to get planted
- Trump and Mexico make a great deal

Basis:\$0.35

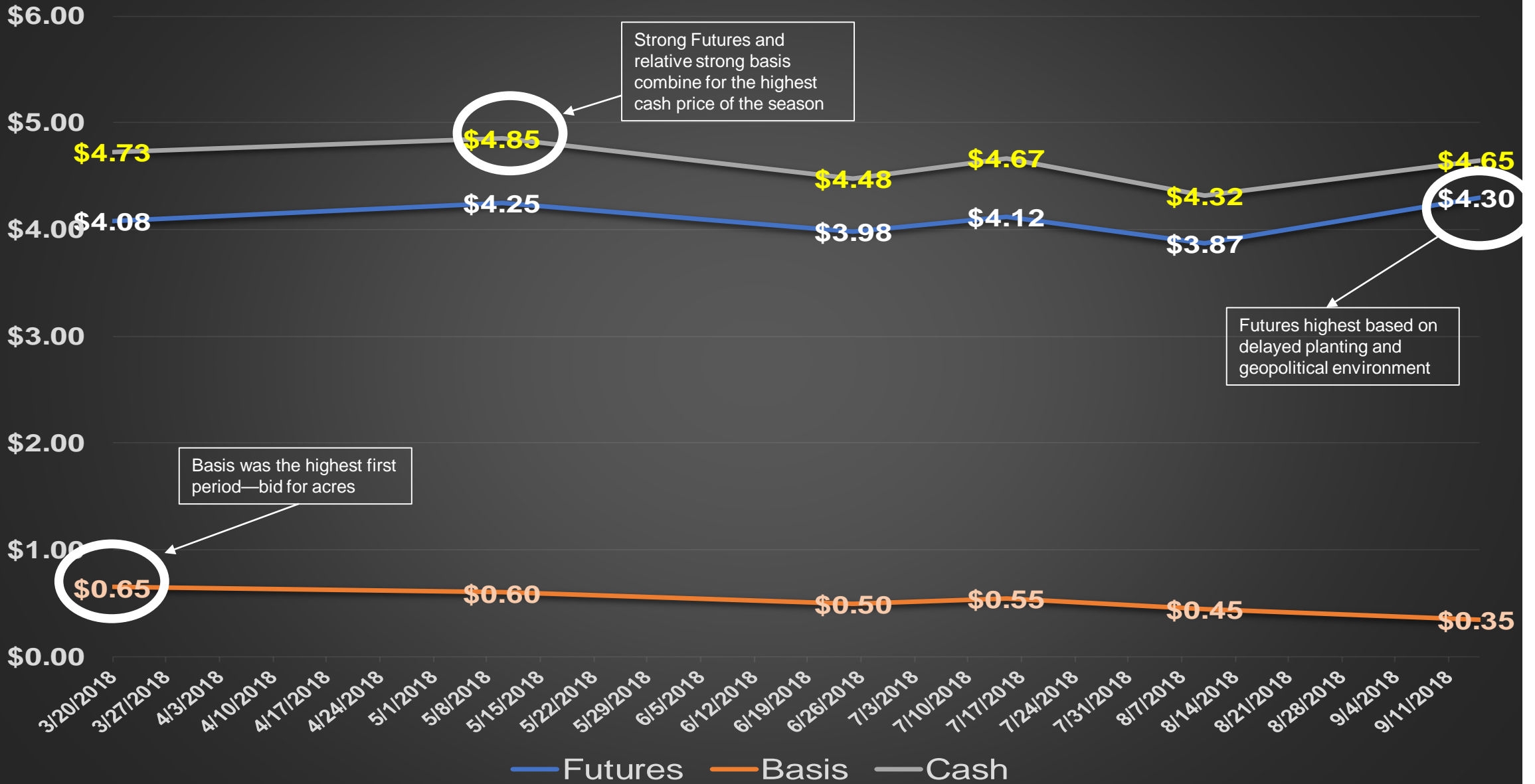
Futures:\$4.30

Date: September 15th 2018

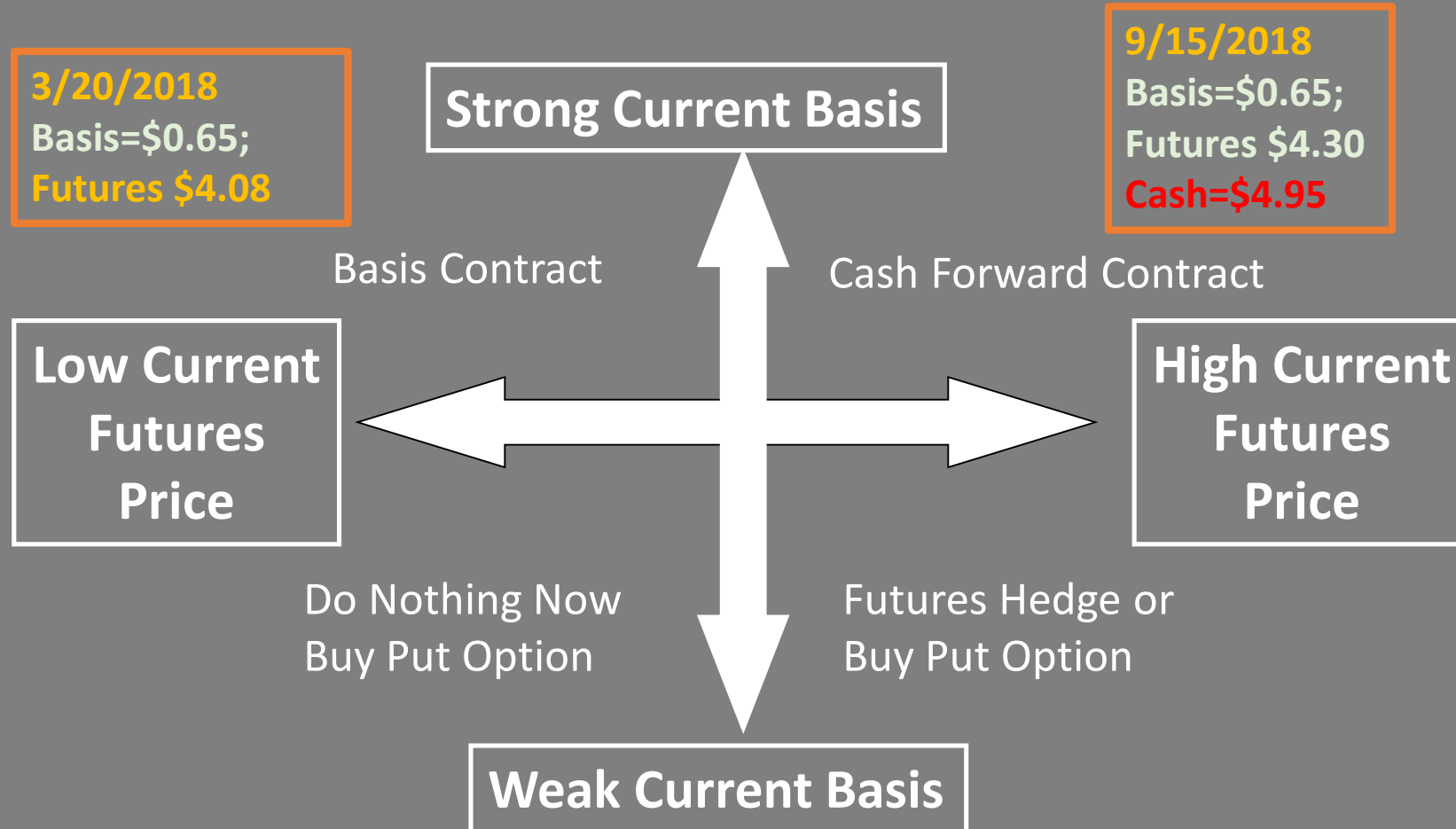
End of the game

- Please hand in your results

Farmer of the Day Game



RECOMMENDED MARKETING STRATEGIES FOR DIFFERENT FUTURES PRICE AND BASIS RISK SITUATIONS: The benefits of hindsight



Date	Scenario			Optimal Strategy Given Hindsight (No Speculating)		
	Futures	Basis	Cash	Basis	Futures	Net Cash Price
3/20/2018	\$4.08	\$0.65	\$4.73	Basis Contract (\$0.65)		
5/10/2018	\$4.25	\$0.60	\$4.85			
6/25/2018	\$3.98	\$0.50	\$4.48			
7/15/2018	\$4.12	\$0.55	\$4.67			
8/10/2018	\$3.87	\$0.45	\$4.32			
9/15/2018	\$4.30	\$0.35	\$4.65		Cash Contract (F=\$4.30)	\$0.65+\$4.30=\$4.95

All About Strategy—Lessons From Top Gun (the movie 1986)

Top Gun—The Birdie—For the Speculators

<https://www.youtube.com/watch?v=KPxDoFbsvWA>

Top Gun—From your Instructor

<https://www.youtube.com/watch?v=EPIPLahykrl>

Top Gun—Getting to Confident The Tower Buzz

<https://www.youtube.com/watch?v=VlliZvuvirs>

Top Gun--Sticking to the rules—Pays in the Long Run From your Instructor

<https://www.youtube.com/watch?v=mNTmQhivfDk>

Speculating **happened** to pay-off this time earning additional profit above the winning strategy

Several had the winning strategy without speculating

	March			May			June			July			August			September			416,000	cost
	basis	HTA	cash	basis	HTA	cash	basis	HTA	cash	basis	HTA	cash	basis	HTA	cash	basis	HTA	cash		
	\$ 0.65	\$ 4.08	\$ 4.73	\$ 0.60	\$ 4.25	\$ 4.85	\$ 0.50	\$ 3.98	\$ 4.48	\$ 0.55	\$ 4.12	\$ 4.67	\$ 0.45	\$ 3.87	\$ 4.32	\$ 0.35	\$ 4.30	\$ 4.65	Revenue	Profit
				100,000						(100,000)			(100,000)			100,000	100,000		\$ 521,000	\$ 105,000
100,000				(100,000)												100,000			\$ 500,000	\$ 84,000
100,000																100,000			\$ 495,000	\$ 79,000
100,000																100,000			\$ 495,000	\$ 79,000
100,000				100,000															\$ 490,000	\$ 74,000
50,000						50,000													\$ 485,700	\$ 69,700
50,000				100,000		50,000													\$ 482,500	\$ 66,500
20,000						50,000												30,000	\$ 481,000	\$ 65,000
50,000				100,000					100,000										\$ 480,000	\$ 64,000
20,000				50,000															\$ 477,500	\$ 61,500
						40,000			5,000		10,000							25,000	\$ 477,100	\$ 61,100
				30,000		30,000										40,000			\$ 477,000	\$ 61,000
		25,000		50,000					15,000									10,000	\$ 476,800	\$ 60,800
50,000				25,000					25,000										\$ 474,250	\$ 58,250
20,000		100,000																	\$ 473,000	\$ 57,000
																		80,000	\$ 471,000	\$ 55,000
																		100,000	\$ 465,000	\$ 49,000
						25,000					25,000							25,000	\$ 462,250	\$ 46,250
15,000					25,000				15,000									20,000	\$ 458,950	\$ 42,950
10,000					20,000				30,000					20,000				20,000	\$ 453,000	\$ 37,000
	50,000			25,000			25,000												\$ 452,250	\$ 36,250
								100,000											\$ 448,000	\$ 32,000
15,000						25,000								20,000				40,000	\$ 433,088	\$ 17,088

Basis contract at planting typically a good strategy