

Grain Marketing Plans

Development & Maintenance

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Outline

- **Developing a Plan**
 - Financial Objectives
 - Setting Triggers (Price and Time)
 - Method of Analysis (Fundamentals, Technicals)
 - Marketing Actions
 - 2001 Crop Example
 - Feb 2001
- **Maintaining a Plan**
 - Implementing the Plan
 - Revising the Plan
 - 2001 Crop Example
 - May 2001

A Marketing Plan Should...

- Remove emotion from the marketing decision and incorporate financial goals
- Be consistent with your approach to marketing.
 - Futures/options
 - Technical/Fundamental Analysis
- **Be revised semi-regularly to incorporate new market conditions and the results of past marketing actions.**
 - It's not practical to try and develop a marketing plan at the beginning of the year and stick to it for the entire year!

Steps to Making a Marketing Plan

- 1. Establish Annual Price Objectives**
 - Target Price
 - Minimum Price
- 2. Develop Marketing Actions**
 - Trigger Prices
 - Trigger Time
 - Default Actions
- 3. Revise Marketing Actions**
 - Evaluate current positions
 - Assess market potential
 - Formulate new Marketing Actions.

Setting Financial (Price) Objectives

- **Identify risk bearing ability**
 - Farm and family financial situation
 - At what price will you reach financial stress?
- **Cost of production**
 - Variable (cash) expenses
 - Total costs (plus management)
- **Establish “Target” and “Minimum” prices**
 - **Target** – a realistic, but slightly optimistic price objective for selling your crop.
 - **Minimum** – a price which will keep your operation solvent for the next year (minimum comfort price).

Setting Target & Minimum Prices

1. **Choose a unique measure of price**
 - Harvest-time cash price
 - Sep (Harvest) Futures Price
 - Adjust post-harvest prices for storage costs.

Setting a Target Price

2. **Target Price** – what price do you think you can realistically **average** for your crop in the coming year.
 - Market Fundamentals
 - Ag Advisory Outlook
 - USDA Forecasts
 - An **average** price means...
 - Selling above the Target
 - Selling below the Target

How to Set a Target Price

- **Market Advisors** – some good, some not so good. Good for input on market factors.
- **Your Analysis**
 - **Technical Analysis** – Chart reading, trend lines, chart formations, moving averages, technical indicators, gaps, etc.
 - **Fundamental Analysis** – Use of commodity supply/demand data to project prices.
 - **Seasonal Analysis** – What is the normal tendency for prices? Futures seasonals vs. cash seasonals.

Setting a Minimum Price

Average price for crop that will not put my operation in financial stress.

- Operating Cost of Production
- Net-worth
- Willingness to Accept Risk
- Living Expenses
- Other sources (LDP, AMTA Payments)

Marketing Actions

- A precise statement of what marketing action will be taken if a **trigger** is hit.

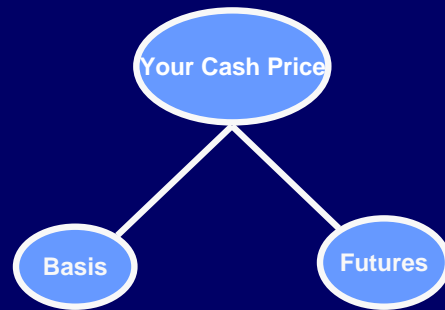
Marketing Actions

Cash Sales
Forward Contract
Futures Contract
Option Contract
Basis Contract

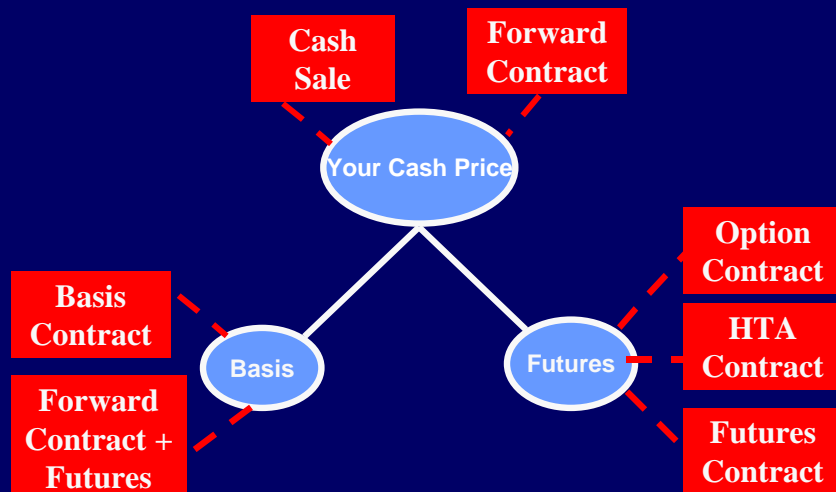
Triggers

Cash Price
Futures Price
Basis
Time

Decomposing the Cash Price

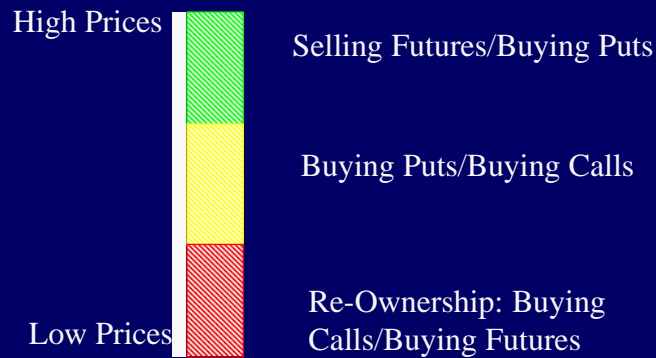


Tools for Controlling Price



Setting Triggers

- **Price** – “At what price will you take a marketing action?”



Setting Triggers

- **Time** – “How does time influence your possible marketing actions?”

Pre-Harvest Harvest Post Harvest

- Price Seasonality
- Cash Flow
- Production Risk
- Have to sell it eventually!

Building the Plan

1. Evaluate current positions

- Too Short, Too Long?
- Average Price sold – *will it get you close to your target or are you in danger of falling below minimum?*

2. Evaluate market activity

- Market trend
- Major support and resistance points.
- Fundamental picture
- Seasonal factors

3. Develop marketing actions for next 3 months.

4. Will my actions achieve the Target or keep me above the Minimum?

Fundamental Analysis

- The use of commodity supply and demand data to forecast prices or price direction.
- Using historical data to estimate statistical relationships and project prices.
- What Explains (Predicts) Price?
 - Supply
 - Demand
 - Ending Stocks

Sources of Information on Supply & Demand

- Public Forecasts (USDA)
 - National Agricultural Statistics Service (NASS)
 - Monthly Crop Production Forecasts
 - Weekly Crop Weather and Growing Conditions
 - Quarterly Stock Reports
 - World Agricultural Outlook Board (WAOB)
 - World Agricultural Supply and Demand Estimates (WASDE) Report -- monthly.
- Private Forecasts
 - Companies release estimates to their clients ahead of USDA reports.
 - Business media will usually report “Average Analysts Estimates” and a “Range of Estimates” prior to the report.
 - Futures market will respond to “unanticipated” news in the USDA report (i.e. if the USDA report is outside of the range of analyst estimates).

Using Supply & Demand Tables

- **WASDE** – estimates of marketing year supply, use and ending stocks for U.S. and World crops.
- USDA begins releasing “new-crop” estimates in May for 2001-02.
- Market advisors provide projections ahead of then.
- Develop your own “guestimates”



Predicting Sep 2001 KC Futures

- **Goal: Forecast the Sep 2001 KC Wheat Futures Price for Sep 1.**
- Important Variable(s)?
- August WASDE Supply Estimate
- August WASDE Total Usage Estimate
- August WASDE Ending Stocks Estimate

- August WASDE Ending Stocks-to-Use Ratio.
 - Captures Supply, Use, and Ending-Stocks in One Number.
- WASDE Reports: <http://usda.mannlib.cornell.edu>
 - Search on WASDE look for World Agricultural Supply & Demand Estimates

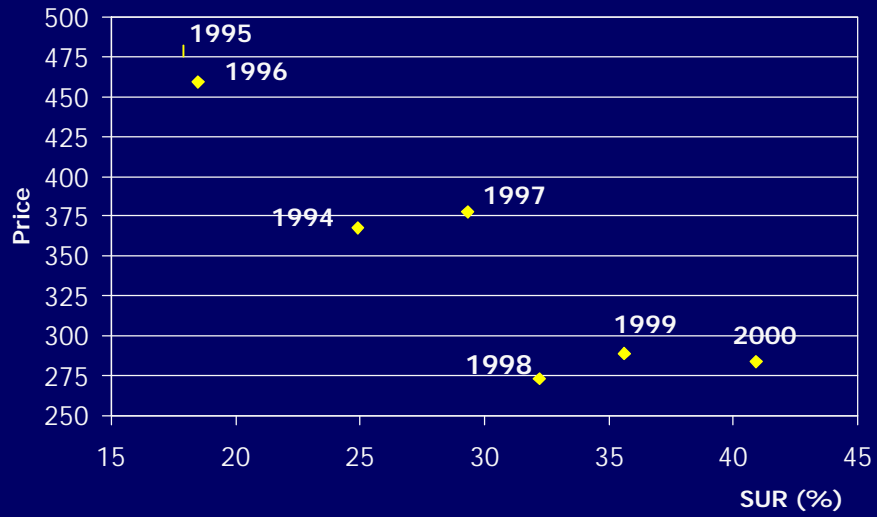
August WASDE Reports & Sep Futures

Date	Ending St	Usage	SUR	Sep Futures
8/12/94	605	2,432	24.9%	368
8/12/95	443	2,395	18.5%	459
8/12/96	409	2,285	17.9%	479
8/11/97	695	2,375	29.3%	378
8/12/98	819	2,543	32.2%	273
8/12/99	884	2,480	35.6%	289
8/11/00	962	2,351	40.9%	284

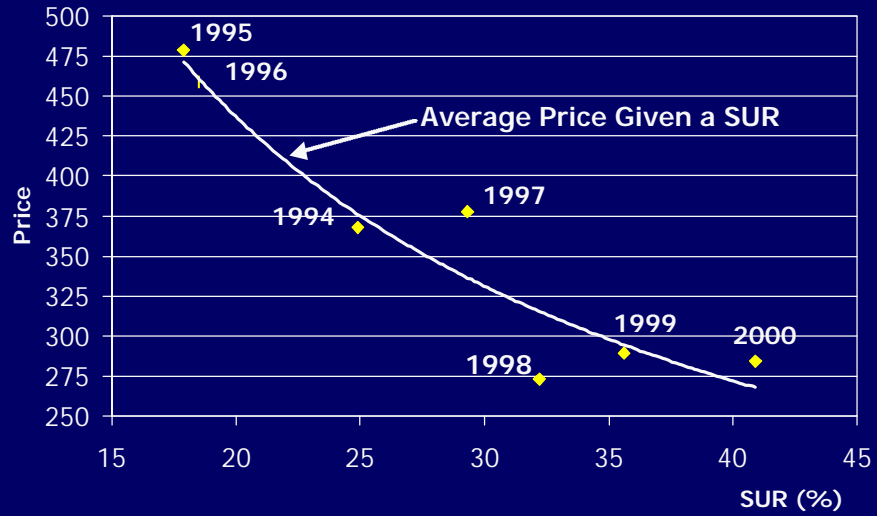



Use to Predict (X-Axis) **Want to Predict (Y-Axis)**

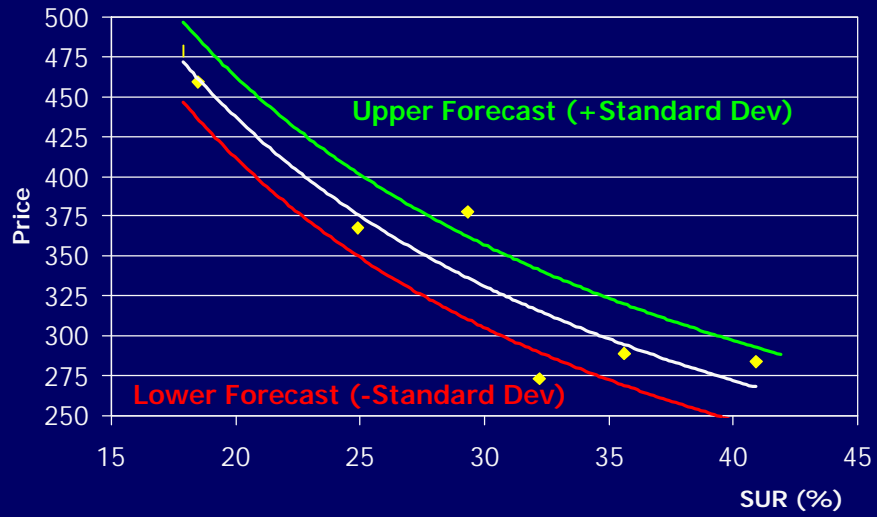
KW Sept Futures Price and Stocks-to-Use Ratio



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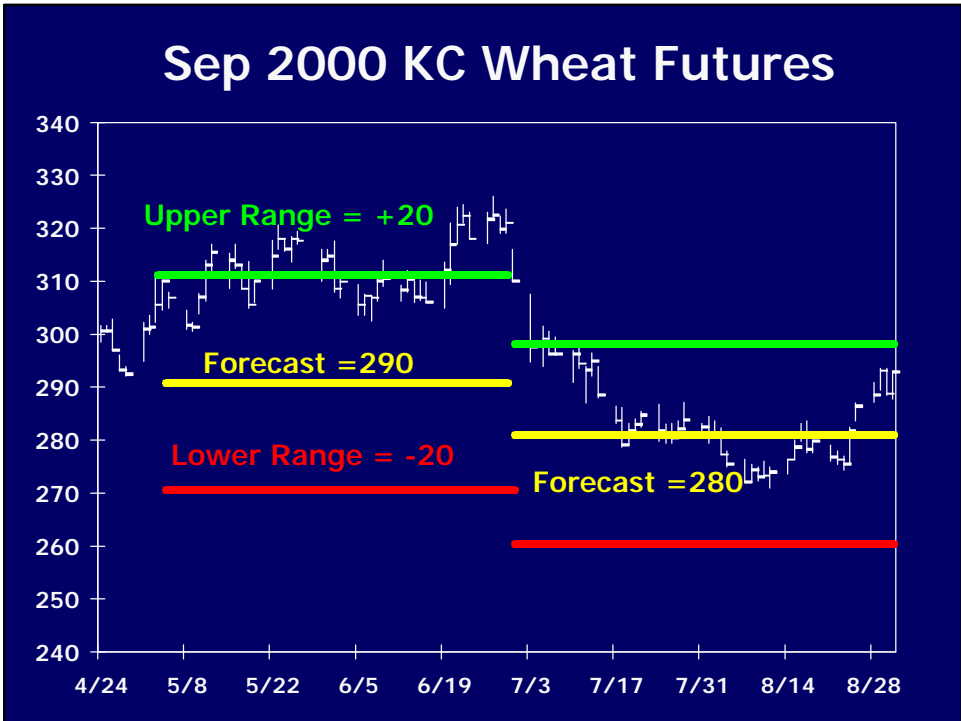
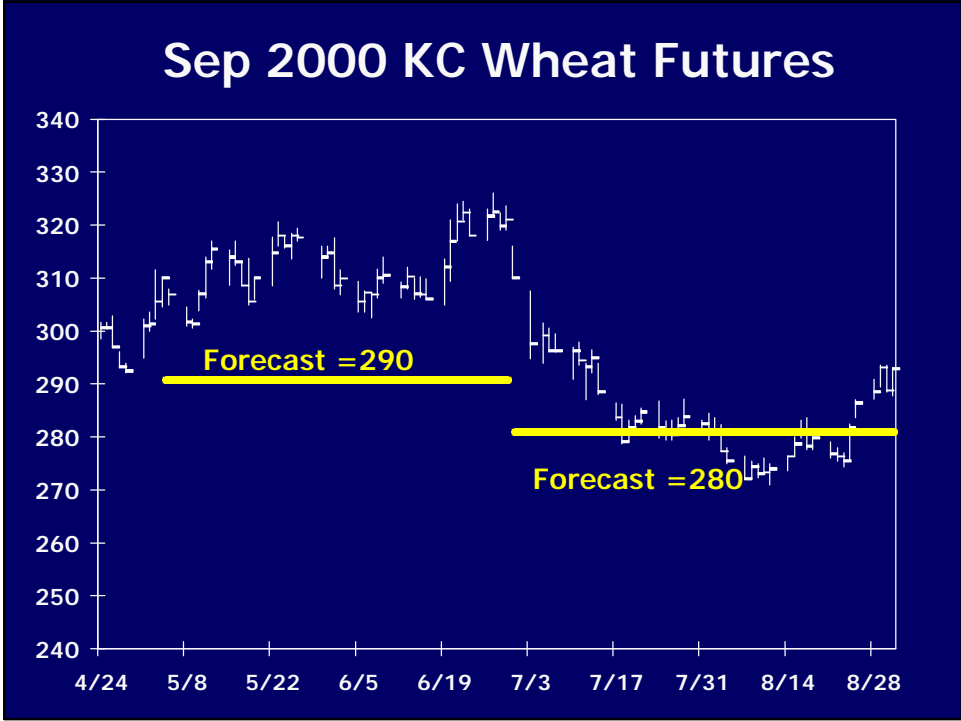


KW Sept Futures Price and Stocks-to-Use Ratio



Sep 2000 KC Wheat Futures



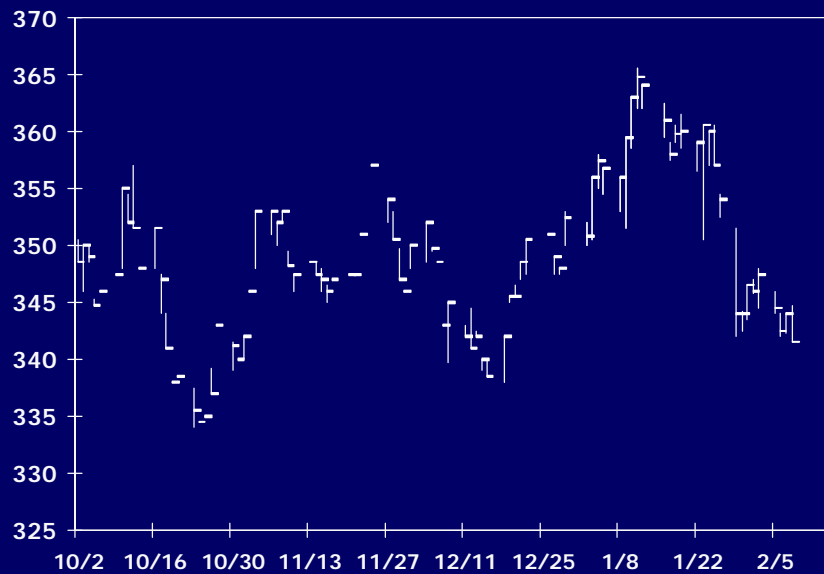


2001 Winter Wheat Marketing Plan as of February 2001

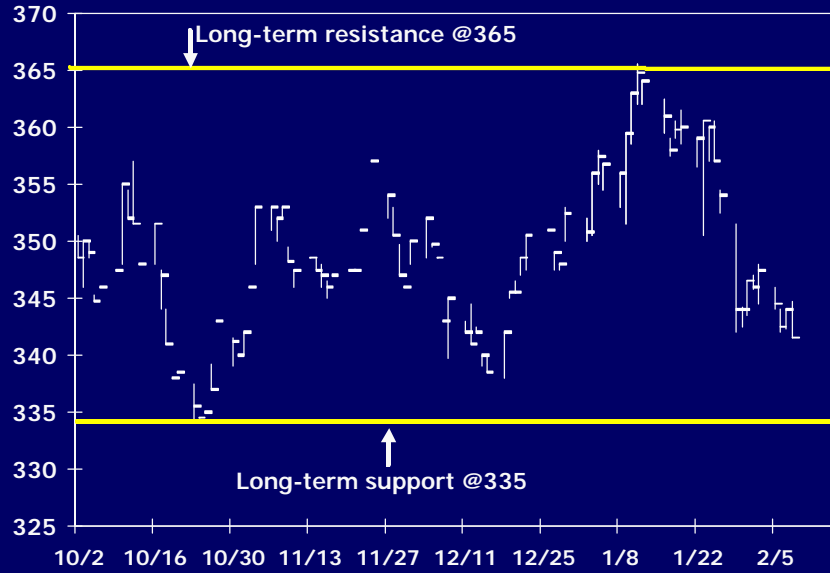
■ Factors to Consider in Pricing My Wheat Crop.

1. Winter Wheat Planting Intentions (Jan 2001).
 - Winter wheat plantings off 5% (2 million acres) in 2001 from 2000.
2. Market Analyst projections
 - Allendale 365; Doane 360 (basis KC Sep)
3. Technical Analysis

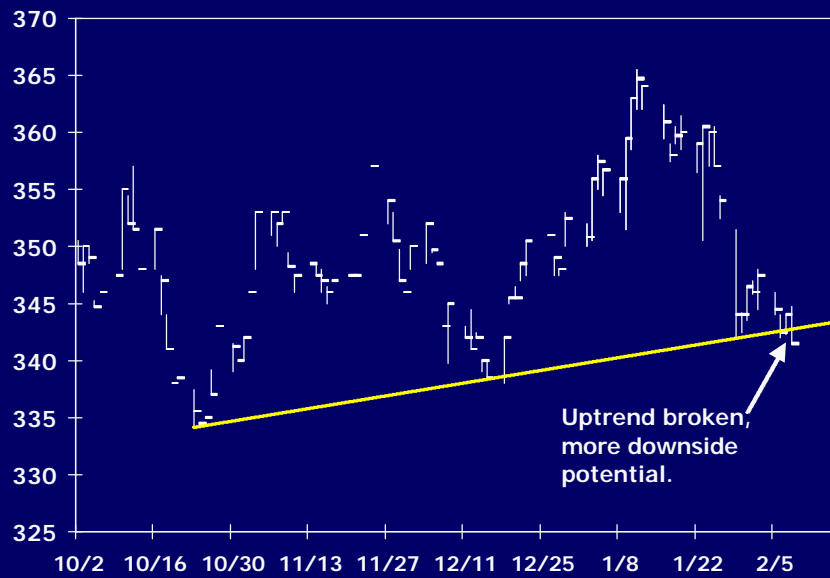
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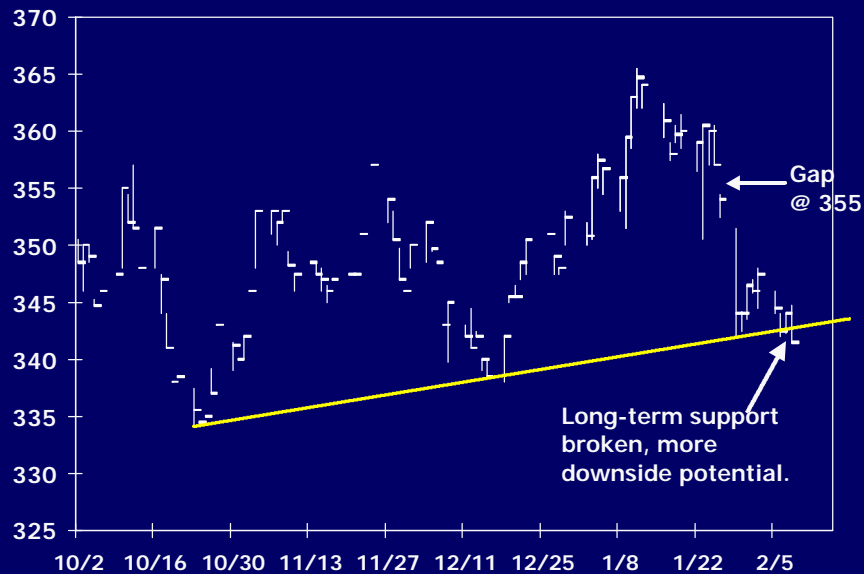
Sep 2001 KC Wheat Futures



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Sep 2001 KC Wheat Futures



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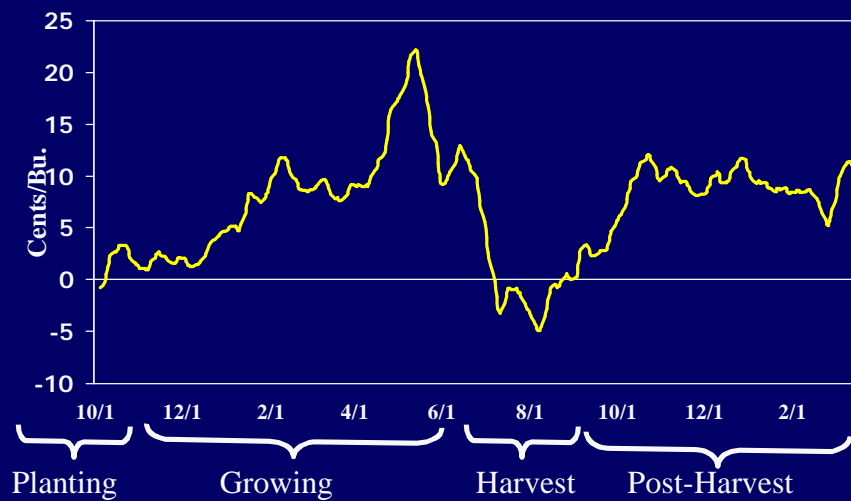
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2. Market Analyst projections
 - Allendale 365; Doane 360 (basis KC Sep)
3. Technical Analysis
 - Trend Direction: Down to Sideways
 - Price Support: 333
 - Price Resistance: 365
 - Gap Objective: 355

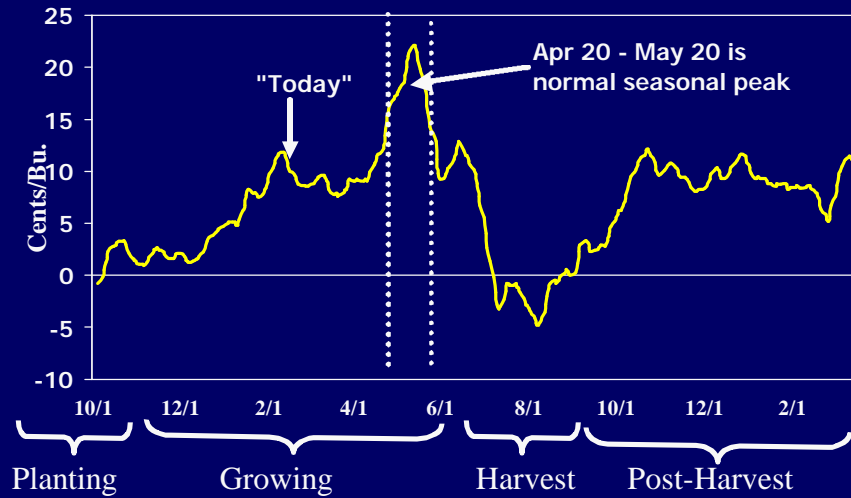
2001 Winter Wheat Marketing Plan as of February 2001

- Factors to Consider in Pricing My Wheat Crop.
 4. Seasonal Analysis

KC Wheat 15-Year Seasonal Price Change (Aug 31 = 0)



KC Wheat 15-Year Seasonal Price Change (Aug 31 = 0)



2001 Winter Wheat Marketing Plan as of February 2001

■ Factors to Consider in Pricing My Wheat Crop.

4. Seasonal Analysis

- Feb-April – Futures market is flat to slightly weaker.
- mid-April – mid-May: Futures market strengthens along seasonal patterns.

2001 Winter Wheat Marketing Plan as of February 2001

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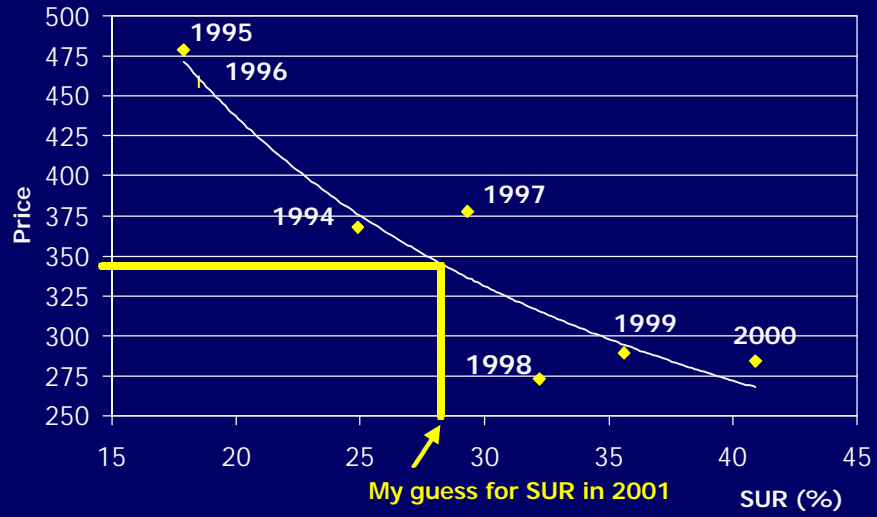
5. Fundamental Analysis

- No WASDE estimates for 2001
- Develop My Guesstimates

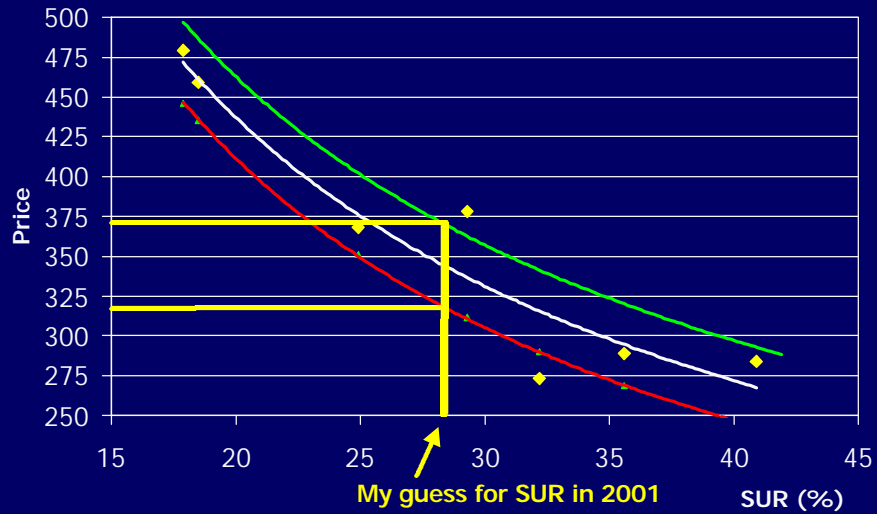
U.S. Wheat Supply and Demand

	<u>2000-01(Feb)</u>	<u>2001-02(My Guess)</u>
Beg. Stocks (mb)	950	850
Planted Acres (mil)	62.5	60.5
Harv. Acres (mil)	53.0	51.5
Yield (bu/acre)	41.9	42.5
Total Supply (mb)	3,268	3,155
Food (mb)	1,029	1,035
Feed (mb)	300	250
Exports (mb)	1,100	1,175
Total Use (mb)	2,429	2,460
Ending Stocks (mb)	839	695
Stocks-to-Use Ratio	34.5%	28.3%

KW Sept Futures Price and Stocks-to-Use Ratio



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2001 Winter Wheat Marketing Plan as of February 2001

■ Factors to Consider in Pricing My Wheat Crop.

4. Seasonal Analysis

- Feb-April – Futures market is flat to slightly weaker.
- mid-April – mid-May: Futures market strengthens along seasonal patterns.

5. Fundamental Analysis

- No WASDE estimates for 2001
- Develop My Guesstimates
- Sep KC Futures Forecast: 345 (325, 370)

Setting My Target Price for 2001

- **Market Analysts** - Upside Potential
- **Technical Analysis** – Short-run down, long-run higher.
- **Seasonal Analysis** – Weak to flat through Apr. Upside in Late Apr-Late May.
- **Fundamental Analysis** – Upside potential.
- **My Target Price: 360**

Building the 2001 Plan: Step 1-Evaluate Current Positions

Feb 2001

No new-crop wheat priced

Target Price: 360 (basis KC Sept)

Minimum Price: 310

Sep Futures: 342

Price Floor (put): 320

Building the 2001 Plan: Step 2-Market Activity

Feb 2001

Trend Direction: Down to Sideways

Price Support: 338

Price Resistance: 365

Building the 2001 Plan: Step 2-Market Activity

Feb 2001

Trend Direction: Down to Sideways
Price Support: 338
Price Resistance: 365
Fundamentals: 345 (325-375)
Seasonal: Strong in Early Feb,
 May.

Building the 2001 Plan: Step 3-Market Actions

Time	Marketing Action	Default Action
Feb-01	<p>(A) Forward price 10% at 355 (basis KC Sep)</p> <p>(B) 5% more for 370.</p>	No Action

Building the 2001 Plan: Step 3-Market Actions

Time	Marketing Action	Default Action
Feb-01	(A) Forward price 10% at 355 (basis KC Sep) (B) 5% more for 370.	No Action
Mar-01	(C) Forward price 10% at 370 (basis KC Sep) (D) 5% more for 385.	If no actions on (A)-(D), forward price 10% at 320 or better.

Building the 2001 Plan: Step 3-Market Actions

Time	Marketing Action	Default Action
Feb-01	(A) Forward price 10% at 355 (basis KC Sep) (B) 5% more for 370.	No Action
Mar-01	(C) Forward price 10% at 370 (basis KC Sep) (D) 5% more for 385.	If no actions on (A)-(D), forward price 10% at 320 or better.
Apr-01	(E) Forward price 10% at 385 (basis KC Sep) (F) 5% more for 400.	Be at least 25% priced. Use ATM puts for a floor of 310 or better.

Building the 2001 Plan: Step 4-Assess Market Actions

If prices rally in the next 3 months...

10% at 355

15% at 370

10% at 385

5% at 400

40% at 374

=> Need to price remaining 60% at 350
or better to reach target.

Building the 2001 Plan: Step 4-Assess Market Actions

If prices fall or trade sideways in the next 3 months...

10% at 320

15% at 310 (floor)

25% at 314

=> Need to price remaining 75% at 309 or
better to stay above minimum.

Building the 2001 Plan: Step 4-Assess Market Actions

Evaluate Ability to Achieve TARGET and Stay above MINIMUM...

IF prices rally, have a good chance of meeting target

IF prices decline, will likely fall below minimum.

=> **Add more downside price protection.**

Building the 2001 Plan: Step 3-Market Actions

Time	Marketing Action	Default Action
Feb-01	(A) Forward price 15% at 345 (basis KC Sep) (B) 10% more for 355.	No actions.
Mar-01	(C) Forward price 10% at 370 (basis KC Sep) (D) 5% more for 385.	If no actions on (A)-(D), forward price 10% at 320 or better.
Apr-01	(E) Forward price 10% at 385 (basis KC Sep) (F) 5% more for 400.	Be at least 40% priced. Use ATM options for a floor of 310 or better.

Building the 2001 Plan: Step 4-Assess Market Actions

If prices fall or trade sideways in the next 3 months...

15% at 345

10% at 320

15% at 310 (floor)

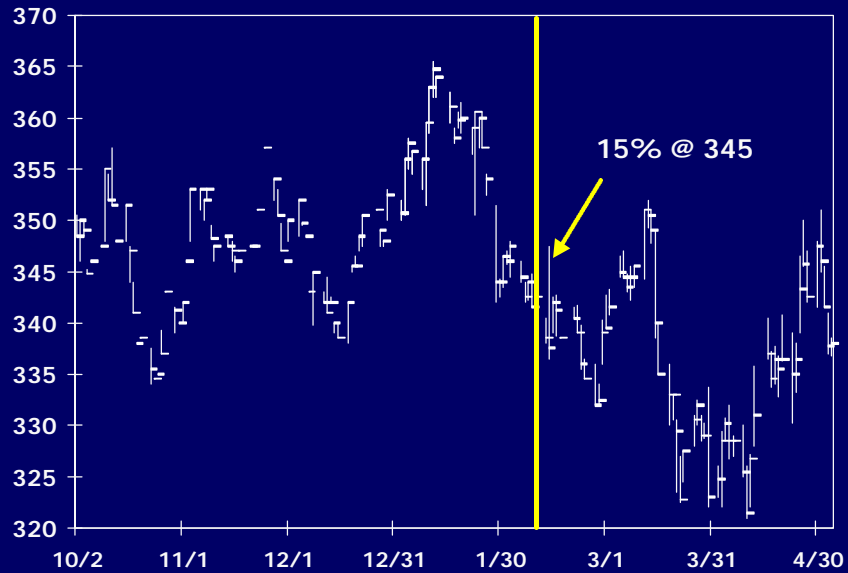
40% at 326

=> Need to price remaining 60% at 299 or better to stay above minimum (310).

How Did I Do?????

- Sold 15% @ 345 on Feb 13, 2001
- No other marketing actions reached.

Sep 2001 KC Wheat Futures



How Did I Do?????

- Sold 15% @ 345 on Feb 13, 2001
- No other marketing actions reached.
- Default actions at the End of April
 - Buy Puts on 25% to get up to 40% priced.
 - Puts should have a floor of 310 or better.
- Bought 330 Puts @10 on April 30, 2001

Current Positions and Avg Price

15%	345
<u>25%</u>	<u>320 (floor)</u>
40%	330

U.S. Wheat Supply and Demand

	<u>2001-02(USDA)</u>	<u>2001-02(My Guess)</u>
Beg. Stocks (mb)	829	850
Planted Acres (mil)	60.3	60.5
Harv. Acres (mil)	50.3	51.5
Yield (bu/acre)	39.0	41.5
Total Supply (mb)	2,886	3,087
Food (mb)	1,045	1,035
Feed (mb)	250	250
Exports (mb)	1,000	1,150
Total Use (mb)	2,285	2,435
Ending Stocks (mb)	591	652
Stocks-to-Use Ratio	25.9%	26.8%

Develop Marketing Plan for 2001 Winter Wheat

- Small Group Exercise.
- No positions taken yet.
- Use futures/options/forward contracts basis Sep KC futures.

Revising the 2001 Plan: Step 1-Evaluate Current Positions

May 2001

40% sold at 330 (basis KC Sep)

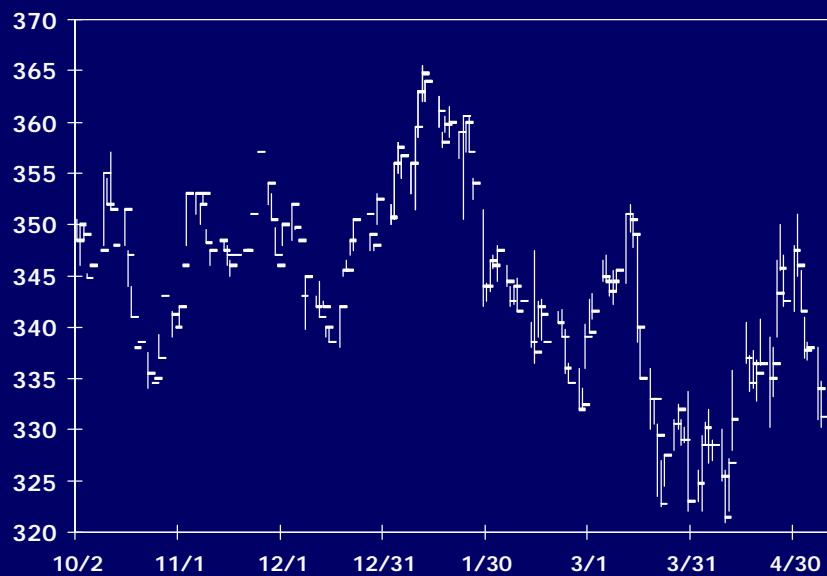
Target Price: 360 (sell 60% @ 380)

Minimum Price: 310 (sell 60% at 295)

Sep Futures: 331

Price Floor (put): 312

Sep 2001 KC Wheat Futures



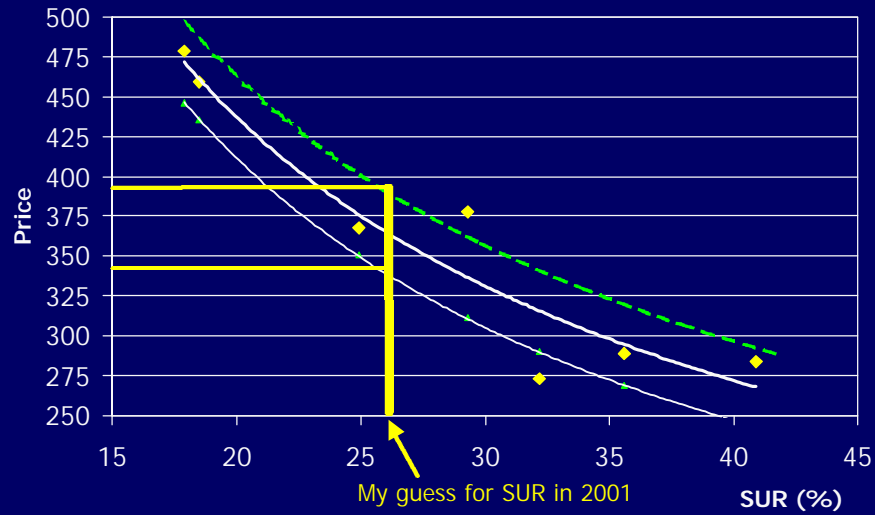
Revising the 2001 Plan: Step 2-Market Activity

- **Market Analysts** - Upside Potential
 - **Technical Analysis** – Rallies quickly fade. May see a return to the lows (320) on rains in the Plains.
 - **Seasonal Analysis** – Strength through mid-May, Weakness in Jun-Aug.
 - **Fundamental Analysis** – Upside potential. Crop is still bad even with rains.
- => I want to be less sold at these prices, with the fundamental picture improving.

U.S. Wheat Supply and Demand

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KW Sept Futures Price and Stocks-to-Use Ratio



Revising the 2001 Plan: Step 3-Market Actions

Time	Marketing Action	Default Action
May-01 Jul-01	<p>(A) Sell 330 Puts for 20 cents (10 cent profit on 25% of crop). Should happen on Futures of 325.</p> <p>(B) If futures fall to 315, buy call options on 10%. Hold until market reaches 360.</p> <p>(C) Price 10% of crop at 360.</p> <p>(D) Price 10% of crop at 375.</p>	<p>(A) If Puts not sold, sell on rally to 350.</p>

Revising the 2001 Plan: Step 4-Assess Market Actions

**If prices decline and then rally in the next
3 months...**

Option Profit: 5 cents on 100%

15% at 345

10% at 360

10% at 375

35% at 363

=> Sell remaining 65% @ 358 to reach target

Revising the 2001 Plan: Step 4-Assess Market Actions

If Rally in the next 3 months...

Put Option Loss: 1 cent on 100%

15% at 345

10% at 360

10% at 375

35% at 359

=> Sell remaining 65% @ 361 to reach
target

Revising the 2001 Plan: Step 4-Assess Market Actions

If Sell-off in the next 3 months...

Put Option Gain: 2.5 cents on 100%

5% at 345

10% at 335 (floor – Buy 320 calls @ 10)

15% at 341

=> Sell 65% of crop sold at 363 to reach target.

Revising the 2001 Plan: Step 4-Assess Market Actions

Evaluate Ability to Achieve TARGET and Stay above MINIMUM...

- In all 3 cases, I have to sell the remainder of my crop around 360 to reach the target price. With fundamentals suggesting 360 as an “average” price, this seems like a feasible set of actions.
- All 3 cases keep me well above 310 minimum price on the amount of crop sold. With positive fundamentals the risk of falling below 300 on futures seems small.

What Makes a Marketing Plan Work?!

1. Know your Market Positions

- Track all of your market positions – where do you stand on % sold and average price?

What Makes a Marketing Plan Work?!

2. Make the Plan Manageable

- Don't expect to set all of your marketing actions for a crop year at once.
- Focus on only those tools you feel comfortable using.
- Keep it on a computer for easy revisions.

What Makes a Marketing Plan Work?!

3. Be Realistic

- Set price targets that are realistic.
- Don't raise price targets (extra cents won't matter much).
- Use multiple sources of analysis for setting price targets (technicals, fundamentals, advisors).

What Makes a Marketing Plan Work?!

4. Have Your Marketing Team Involved.

- Family & business partners.
- Brokers – use Good-Till-Cancel trading orders to establish marketing actions.
- Grain buyers – use Wish orders.