

Corn and Soybean Projected Profitability 2011

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Corn and Soybean Prices New Crop 2011

<u>Price Scenario:</u>	<u>Corn</u>	<u>Soybeans</u>
Low	\$5.10	\$11.25
Baseline	\$6.10	\$13.50
High	\$7.10	\$15.75

Budget Assumptions

Input w/Greatest Impact on Profit?

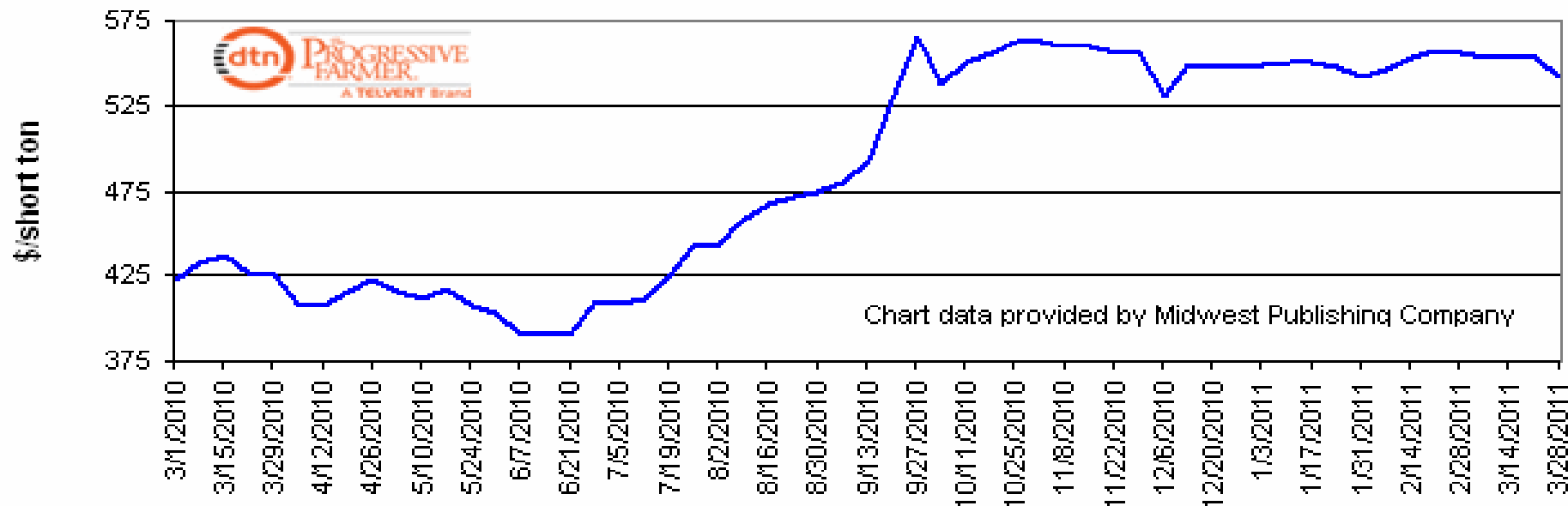
- Fertilizer Cost.
→ *Let's look at fertilizer prices.*

Budget Assumptions

Fertilizer Prices:

- Spiked summer/fall 2010.
- Where will they end up?
 - *Start with wholesale prices.*
 - *Will show us trends.*

DAP Barge Prices FOB NOLA

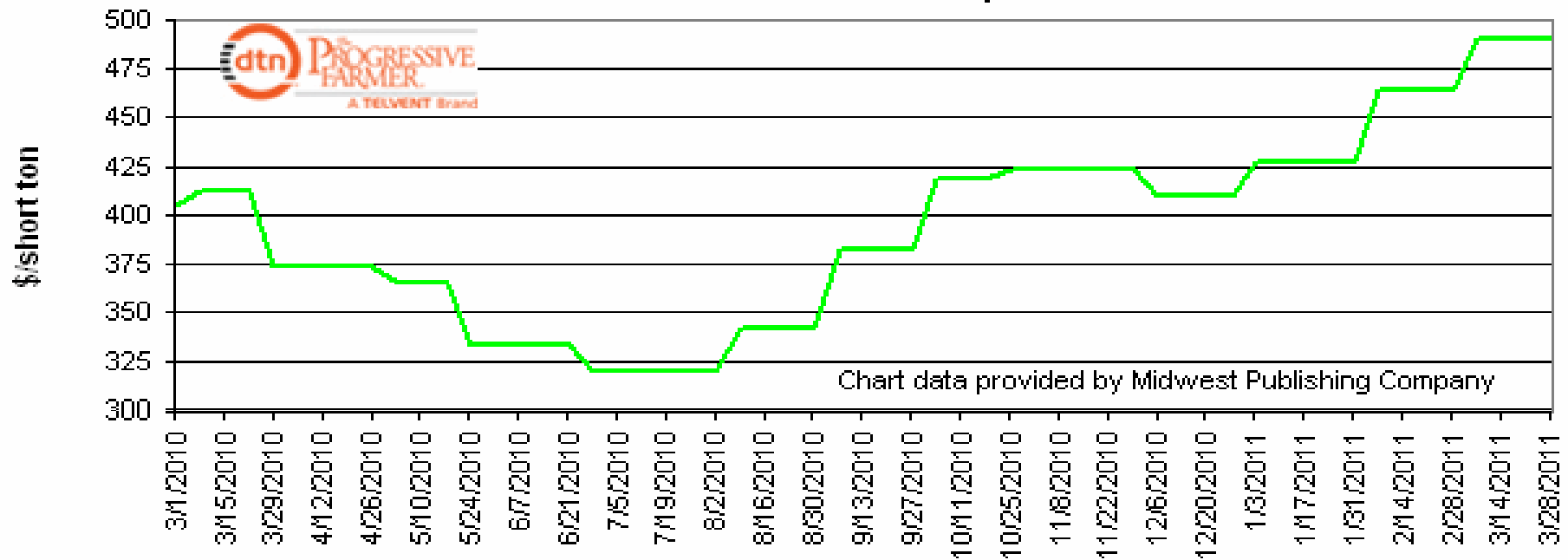


Recent Trend: Slightly lower

Reason for Trend: World DAP market prices were flat through much of the month. Uncertainty remains about future direction until there is some sort of settlement between Indian buyers and DAP exporters. In the domestic market high crop prices still seem likely to encourage strong spring corn plowdown demand. Demand in second tier crop markets could be diminished by high DAP prices. For the short term we look for NOLA DAP prices to run flat to slightly lower.

Prices are wholesale; the retail price a producer pays will differ, often significantly. The chart's value is in its depiction of wholesale price trends, which usually are reflected at the retail level.

Ammonia Price Short Ton Tampa

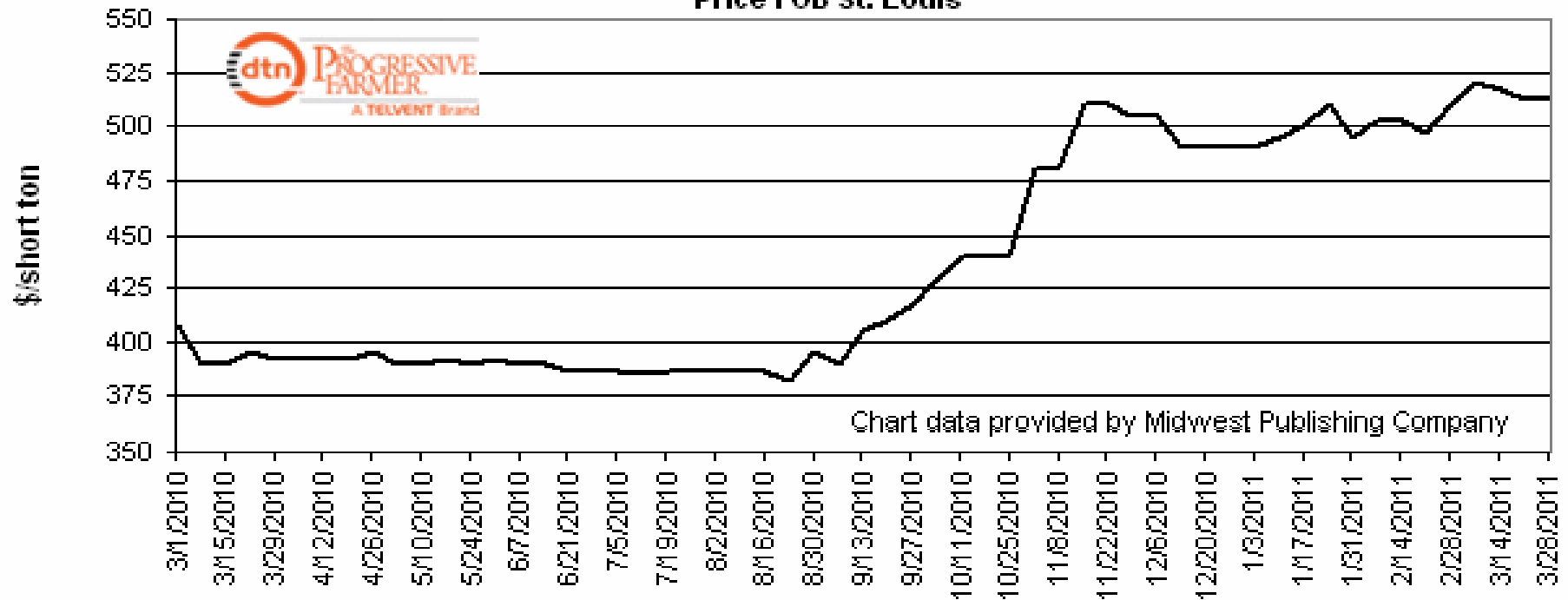


Recent Trend: Flat to higher

Reason for Trend: Domestic ammonia prices at interior terminals were flat through the month but holding at high levels. World ammonia market supplies continue tight basis continued heavy DAP/MAP production and outages at several ammonia export facilities. We look for domestic ammonia prices to run steady to higher in the short and medium term.

Prices are wholesale; the retail price a producer pays will differ, often significantly. The chart's value is in its depiction of wholesale price trends, which usually are reflected at the retail level.

Potash Price FOB St. Louis



Recent Trend: Flat to higher

Reason for Trend: Potash prices moved higher at month's beginning and eased slightly at month's end. Winter conditions are delaying the start of strong movement of potash to the field. As in the case with DAP, however, some believe high potash prices are creating demand destruction in fertilizing second tier crops. Also there continues little sign of competition among potash suppliers. We expect short term potash prices to run flat to slightly higher.

Prices are wholesale; the retail price a producer pays will differ, often significantly. The chart's value is in its depiction of wholesale price trends, which usually are reflected at the retail level.

Budget Assumptions

Base Scenario		
<u>Fertilizer:</u>	<u>\$/ton</u>	<u>\$/unit</u>
Anhydrous (N)	\$790	\$.48
DAP (P₂O₅)	\$680	\$.55
Potash (K₂O)	\$590	\$.49

Budget Assumptions

Fertilizer Quantity (per acre)

150 bu corn:

- 160 units N
- 60 units P_2O_5
- 53 units K_2O

45.5 bu soybeans:

- 32 units P_2O_5
- 50 units K_2O

Budget Assumptions

Land Rent:

- Highly variable.
- Not included in the budgets.
→ *Subtract from net revenue.*

Budget Assumptions

Machinery and Labor:

- Fuel, Repairs, Depreciation, Labor.
- Based on Custom Machinery Rates.
→ Increased 25%.
- Adjusted to \$3.50 fuel price.
- Trucking – 15 miles (one-way).

Budget Assumptions

Other:

- \$2.25/gallon LP 3 pts removed.
- Direct Payment \$20/acre.

Three Soil Productivity Levels

Corn Yield	Soybean Yield	Corn/Soybean Yield Ratio
125 bu	39.0 bu	3.2
150 bu	45.5 bu	3.3
175 bu	51.5 bu	3.4

Projected 2011 Costs (per acre)

<u>Inputs:</u>	<u>Corn (150 bu)</u>	<u>Soybeans (45.5 bu)</u>
Seed	\$76	\$45
Nitrogen	\$77	\$0
P, K, and Lime	\$69	\$52
Pesticides	<u>\$35</u>	<u>\$25</u>
Total Inputs	\$257	\$122
Machinery and Labor	\$121	\$85
Other:		
Drying Grain	\$21	\$0
Crop Insurance	\$20	\$20
Misc.	\$20	\$20
Land Rent	<i>Variable</i>	<i>Variable</i>
Operating Interest	<u>\$13</u>	<u>\$7</u>
Total Other	\$74	\$47
Total Costs	<i>\$452 + Land Rent</i>	<i>\$254 + Land Rent</i>

Machinery and Labor Costs 150 bu/acre Corn (per acre)

Fuel and Lube	\$24
Repairs	\$28
Labor	\$21
Depreciation/Overhead	<u>\$48</u>
Total	\$121
<i>Note: Assumes grain trucked directly to elevator and not stored.</i>	

Machinery and Labor Costs 45.5 bu/acre Soybeans (per acre)

Fuel and Lube	\$16
Repairs	\$20
Labor	\$16
Depreciation/Overhead	<u>\$33</u>
Total	\$85
<i>Note: Assumes grain trucked directly to elevator and not stored.</i>	

Following Costs Increase with Yield:

- Fertilizer
- Machinery and Labor
- Drying (corn)
- Interest

Costs Representative of Western KY

Higher Costs in Rest of State:

- Nitrogen \$5-15/acre
- Harvesting \$0-15/acre
- Trucking \$10-50/acre

Summary Revenues/Costs (per acre)

<u>Yield and Price:</u>	<u>Corn</u>	<u>Soybeans</u>
Expected Yield (rotation)	150	45.5
Future's Price Fall 2011	<u>\$6.10</u>	<u>\$13.50</u>
Grain Revenue	\$915	\$614
Direct Gov't Payment	<u>\$20</u>	<u>\$20</u>
Total Revenue	\$935	\$634
Total Costs (Less Land Rent)	<u>\$452</u>	<u>\$254</u>
Gross Return (Less Land Rent)	\$483	\$380

Baseline Scenario (per acre)

\$ 13.50 Soybeans (elevator)

\$ 6.10 Corn (elevator)

\$.48-N; \$.55-P; \$.49-K

	Gross Return Corn	Gross Return Soybeans	Gross Return Rotation
125 bu corn	\$353	\$300	\$327
150 bu corn	\$483	\$379	\$431
175 bu corn	\$613	\$454	\$534

Note: Subtract land rent to get Net Return.

High Fertilizer Price Scenario

<u>Fertilizer:</u>	<u>\$/ton</u>	<u>\$/unit</u>
Anhydrous (N)	\$890	\$.54
DAP (P₂O₅)	\$780	\$.65
Potash (K₂O)	\$690	\$.58

Fertilizer Price Effects (decrease in profit)

Increasing Fertilizer Prices \$100/ton
(per acre)

	Corn Change	Soybean Change	Rotation Change
125 bu corn	\$17	\$6	\$12
150 bu corn	\$19	\$7	\$13
175 bu corn	\$21	\$8	\$15

Note: Increased in Fertilizer Prices due to \$100/ton increase in N, P, and K prices.

Putting Input Prices in Context

Fertilizer:

- Corn price drop necessary to equal \$100/ton fertilizer price increase?
→ *\$.09/bu*
- What is typical volatility in corn price in an avg. week?
→ *Far greater than \$.09/bu*
- Marketing crop far more important than input prices right now.

What if Commodity Prices Change?

How will this impact profit?

→ *Let's look at two scenarios.*

High Commodity Price Scenario

\$15.75 Soybeans (elevator)

\$ 7.10 Corn (elevator)

\$.48-N; \$.55-P; \$.49-K

	Gross Return Corn	Gross Return Soybeans	Gross Return Rotation
125 bu corn	\$478	\$388	\$433
150 bu corn	\$633	\$482	\$557
175 bu corn	\$788	\$570	\$679

Note: Subtract land rent to get Net Return.

Low Commodity Price Scenario

\$ 11.25 Soybeans (elevator)

\$ 5.10 Corn (elevator)

\$.48-N; \$.55-P; \$.49-K

	Gross Return Corn	Gross Return Soybeans	Gross Return Rotation
125 bu corn	\$228	\$212	\$220
150 bu corn	\$333	\$277	\$305
175 bu corn	\$438	\$338	\$388

Note: Subtract land rent to get Net Return.

Summary and Discussion

Commodity Price Outlook:

- Current price levels extremely profitable.
- Concentrate on marketing – not worrying about input prices.
- How long will prices stay this high?
 - 2011?
 - 2012 and 2013?
- *What will happen if they drop?*