# DTN Ethanol Edition User Guide

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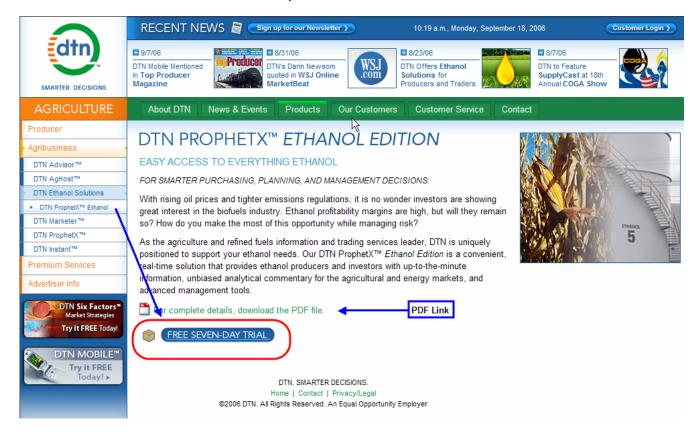
# **Ethanol Edition Download**

To download the ProphetX Ethanol version or read more about the Ethanol Edition, please go to your internet explorer window and enter this url:

http://www.dtn.com/agriculture.cfm?sidenav=sn ag agribiz eth&content=prophx ethanol

To read the PDF file about Ethanol edition, please click on the PDF link above the Free Seven-Day Trial button.

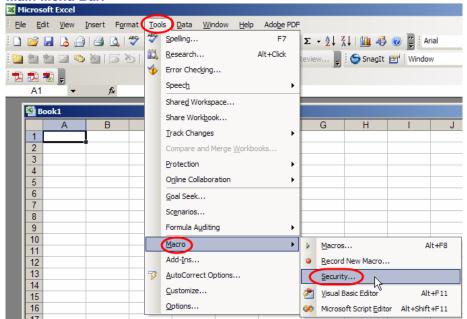
1. To download, click on the Free Seven-Day Trial link:



- 2. Please complete the registration form.
- 3. Click on the Software Acceptance agreement.
- 4. Click on the Download button Please note: Your e-mail address will be your ProphetX log-in
- 5. Select the Run button to start the ProphetX installation.
- 6. Please follow the instructions on each screen for installation and use the default settings that display. If you run into any download problems, please don't hesitate to contact our support group at 800-532-0136 or e-mail prophetx@dtn.com
- 7. Once the download has been completed, you are ready to run the program.

# Launching ProphetX and the Ethanol Workbook

Before launching the Ethanol Workbook, please open Excel and select Tools/Macros/Security from the Main Menu Bar.



Under Security, please select LOW. This will allow you to view the spreadsheet in ProphetX. (This needs to be set only the first time you open the spreadsheet.)

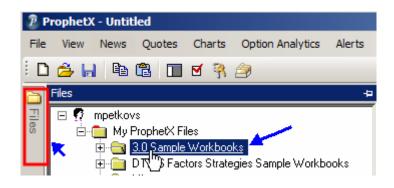
- 1. Double-click on the ProphetX icon on your computer's desktop.
- The ProphetX Log-In screen will display. Enter your e-mail address in the User ID area. If there is no Server name displayed, click on the drop-down arrow to select prophetx1.dtn.com.

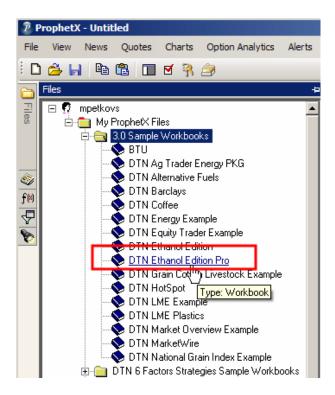


3. If you're a new ProphetX user, an auto-registration screen will pop up. Please fill it out completely and select the Ethanol edition. This will automatically open the Ethanol Pro workbook for you.



4. If you've been using ProphetX, to launch the Ethanol workbook, move your pointer to the Files docked toolbar on the left side of the screen. Click on the + sign next to 3.0 Sample Workbooks, and double-click on the DTN Ethanol Edition Pro workbook.





The workbook will now open.

# The Ethanol Workbook

There are several Page Tabs at the bottom of the workbook:

**NYMEX** and **CBOT** – this page displays quotes for the NYMEX energy contracts and the CBOT grains and ethanol contracts. These quotes are linked directly to the news and charts on this page. When you click on a quote symbol, the corresponding news will open at the bottom of the screen and the chart will update with that symbol's history.

**National Corn Index and Spot Bid Map** – this page displays the corn index quotes with a linked chart at the bottom of the page. When you click on a symbol in the quote sheet the chart will update automatically. The news page contains Grains commentary and analysis. When you click on the story title the contents of that story will display in the lower pane of that display. The default is the US Spot Corn Bid Map showing local cash grain prices and basis level.

Nat Gas and Corn Options – This page displays two page tabs at the top. One for Corn Options Strikes and one for Natural Gas Options Strikes. These will display every strike for every options contract that is currently trading for each of these instruments. The buttons at the top of the display allow you to display various information in the options display.

§ Strikes C   § Strikes NG											
NC IV	Ol	Bid	Ask	Vol 1	heo	Delta	Gamma	Theta	Vega		
					$\top$		Nov				
		Oc	t '06								
UnderSymbol		C	Z6								
UnderPrice		24	7.0								
DTE			4								
ExpDate		9/2	2/06			10/27/06					
Volatility	0.2628					0.2628					
IVS						25					
IntRate		5.4	12%			5.42%					
	Ca	alls	P	uts		Calls Puts			uts	Calls	
Strikes	Price	Change	Price	Chang	e l	Price	Change	Price	Change	Price	Chan
1000	)									141' 6s	
1600										87' 6	
1700										3' 0	
1800											

The default shows the Net Change (NC) but you can click on any of the other buttons to show Implied Volatility, Open Interest, Bid, Ask, Volatility, Theoretical Value, Delta, Gamma, Theta, or Vega, respectively. To see additional options contracts months, scroll to the right.

**NG Spreads and Strips** – this page displays the spreads (the difference between contract month prices) for all the natural gas contracts that are currently trading. The lower window displays the natural gas strips. A strip is an average price for any number of contracts. For example, look at the current month column and move down to the row that has 12 Month listed under the strip column.....this is the average price of the 12 contract months starting with the current month.

**Ethanol vs. RBOB** – this is a chart comparing the prices on each instrument. The lower portion of the chart shows the spread (difference) between ethanol and RBOB.

**Seasonal Corn Chart** – This chart overlays the corn contracts for the past 4 years. The purple line displays the 4-year average.

There are 4 chart tabs on this page; New Crop (December CBOT Contract) actual prices and percent change (to take out inflation). And Old Crop (July CBOT Contract) actual prices and percent change. Click on the chart line itself to see the year it represents.

**DTN MarketWire: Ethanol** - These pages show DTN's ethanol market commentary and analysis. Includes daily market commentary, daily spot prices, city rack price averages, plant production rates, and inventory levels.

**DTN MarketWire** - This page shows all the MarketWire commentary and analysis - the news indexes are linked to the actual news contents at the bottom of each index. Notice the page tabs at the top of the MarketWire Petroleum page – these are all linked to the bottom page view.

**DTN MarketWire (Elementized)** – these are the MarketWire symbols linked to their chart history. Click on the symbol and the chart at the bottom of the screen will update. At the top of the page there are multiple tabs to show the market data in each of the regional spot markets.

**DTN FastRacks** – Close to 1100 unique terminals with dozens of products available to view. The default is only a sample of what is available for Lincoln, NE. and Des Moines, IA FastRacks. Ethanol Edition subscribers will receive 2 locations with their subscription. For additional locations, please contact your sales rep. (See Displaying Fast Racks for other locations in Addendum A at the end of this document.)

**Strategies** – the DTN Six Factors Strategies for Corn, Natural Gas and Unleaded Gas are displayed on these pages. The news index page for each of these strategies has a selection called How it Works. This page explains what the 6 Factors are and how they are used to determine the analysis and recommendations for each instrument.

**News – Grains and Fuels** – This page displays various news, based on searches – to search a news page, select News from the Main Menu Bar at the top – then select Search Scrolling News or Search Fixed News (to receive comprehensive news we suggest you do both news searches). Select the data vendor from whom you want to view the news (typically DTN). Type a keyword for what you want to find. Select Titles, Stories, or both to search for that keyword only in the Title or both in the title and the story contents.

**Ethanol Stocks** –displays stock prices for companies heavily invested in ethanol. Notice the chart and news are all linked to the company you select in the quote board display.

**DTN Ethanol Information Center (www.dtnethanolcenter.com)** - DTN's premier one-stop resource ethanol website. Includes a comprehensive ethanol plant database and map (includes status and feedstock), updates on Renewable Fuels Standards Policies, and an interactive Ethanol Blog.

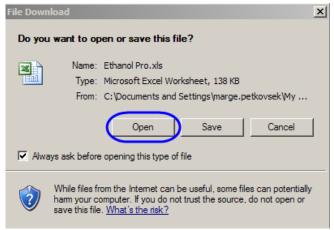
**Natural Gasoline** –displays the MarketWire natural gas symbols spot markets for natural gasoline as their corresponding history is linked to the quotes.

**Distillers Grains** –displays distiller's news and spot pricing information.

**DTN Corn Crush with HedgeMinder** – this is a customizable spreadsheet that is imbedded within the workbook, that allows you to monitor and track required feedstocks to planned production, and determine your current hedged positions.

Before opening this page, please make sure you've modified your spreadsheet as shown at the beginning of this document.

When you click on this page tab, a dialog box will pop up asking if you want to open or save this file. *Please click on Open.* 

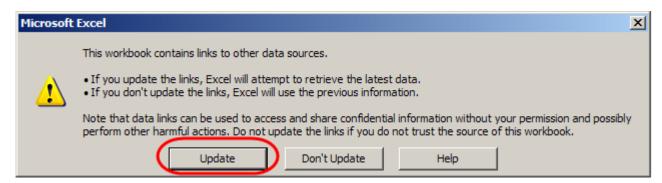


Excel opens in the background.

Please navigate to the Excel program where a dialog box will ask for a password to open the spreadsheet. Enter the password you received in your e-mail after downloading ProphetX.



Excel will also ask if you want to update the spreadsheet with the latest prices linked from ProphetX.



Please select Update.

Now go back to ProphetX to see the populated Corn Crush spreadsheet.

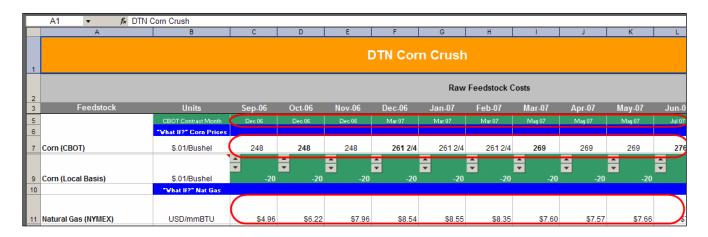
# **DTN Ethanol Risk Management Tools**

There are a number of page tabs in this spreadsheet:

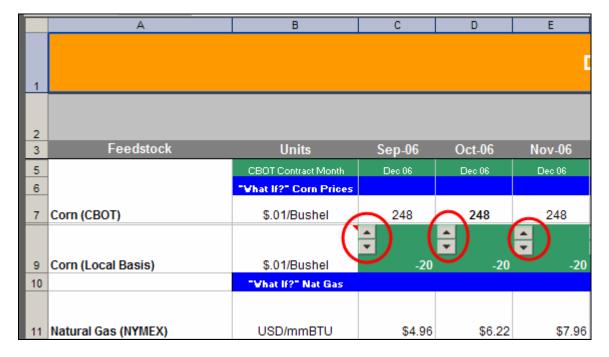
**Instructions for Use** – Explains what each of the spreadsheet pages accomplishes. Overview of colors:

Green and Blue areas you can edit. White cells have equations and links so please do not edit these.

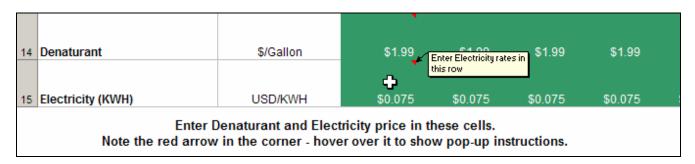
**DTN Corn Crush** – The corn and natural gas prices and descriptions for each month are linked directly to the spreadsheet from ProphetX. *These entries should never be changed.* 



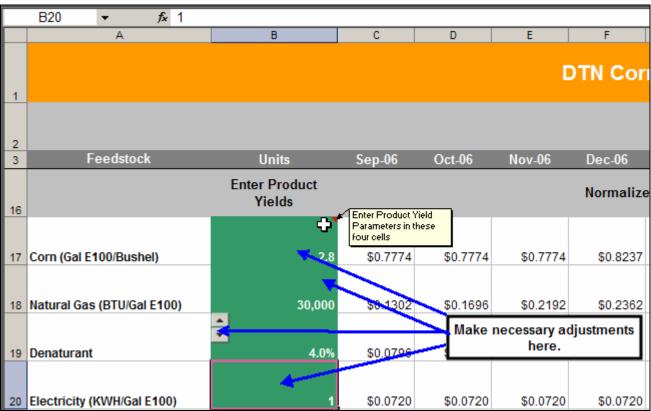
**Basis adjustments** for both corn and natural gas can be made by clicking on the up/down arrows in the rows labeled Corn (Local Basis) and Natural Gas (Local Basis). *Please do NOT manually change this number, as it is used in an underlying calculation.* 



Denaturant and Electricity prices can also be adjusted to suit your operations' cost.



**Product Yields** vary depending on the plant. In the green area in this section, the user may update the various yields. Please note: The units vary depending on the feedstock.



Reminder: The red arrow will display the pop-up instructions in this area. Any time you see an up/down arrow, please use it to make cell changes. There are hidden formulas in these cells.

In the section titled **Profitability per Gallon Denatured Ethanol E100**, you can enter the proportions and prices that have been contracted for (rows 25 and 26) or that the user expects to contract for (rows 27 and 28). The balance of planned production (row 23) will be priced at the prevailing CBOT futures price (row 24). In this area only the Green and yellow rows should be edited.

The price received per ton of Distiller Grains can be edited in the yellow row 30.

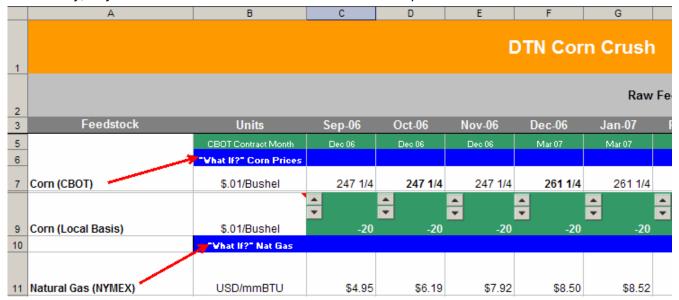
		Profitability per Gallon Denatured E100									
22	Denatured Fuel Ethanol	Auto - Do Not Adjust	10%	10%	20%	20%	40%	40%	50%	50%	60%
	(Benchmark: CBOT Prompt										
24	Month "AC")	USD/Gallon	\$1.845	\$1.820	\$1.805	\$1.805	\$1.800	\$1.795	\$1.845	\$1.840	\$1.835
25	<del>-</del>	Enter % Contracted	60%	60%	50%	50%	40%	40%	30%	30%	30%
	Contracted Price Denatured										
26	Fuel Ethanol	USD/Gallon	\$3.250	\$2.650	\$2.550	\$2.550	\$2.550	\$2.500	\$2.500	\$2.450	\$2.350
27-		Enter % Projected	>30%	30%	30%	30%	20%	20%	20%	20%	10%
	Projected Price Denatured										
28	Fuel Ethanol	USD/Gallon	\$3.350	\$2.750	\$2.500	\$2.500	\$2.500	\$2.500	\$2.400	\$2.400	\$2.400
	Average Sales Price -										
29	Denatured Fuel Ethanol	USD/Gallon	\$3.140	\$2.597	\$2.386	\$2.386	\$2.240	\$2.218	\$2.153	\$2.135	\$2.046
304	•	Enter DDG Price in \$/Ton -	\$70.00	\$72.00	\$72.00	\$74.00	\$76.00	\$76.00	\$74.00	\$70.00	\$68.00
	DDGs (By-Product Revenue)										
31	(Fixed at 17 Lbs/Bushel)	USD/Gallon	\$0.213	\$0.219	\$0.219	\$0.225	\$0.231	\$0.231	\$0.225	\$0.213	\$0.206
	Total Revenue per Gallon										
32	Denatured E100 Produced	USD/Gallon	\$3.352	\$2.816	\$2.605	\$2.611	\$2,471	\$2,449	\$2.377	\$2.348	\$2,252
32	Gross Margin per Gallon	COD/Gallon	ψ5.552	Ψ2.010	Ψ2.003	Ψ2.011	Ψ2.471	Ψ2.443	Ψ2.311	Ψ2.540	Ψ2.202
	Denatured E100 Sold (Ethanol										
33	Only)	USD/Gallon	\$2.081	\$1.499	\$1.238	\$1.174	\$1.027	\$1.010	\$0.943	\$0.925	\$0.833
	Total Gross Margin per Gallon										
	Denatured E100 Produced										
34	(Including DDGs)	USD/Gallon	\$2.293	\$1.718	\$1.457	\$1.398	\$1.258	\$1.241	\$1.168	\$1.137	\$1.039

All other fields are calculated or dynamically linked from ProphetX.

In the final section, Net Profit Calculations, you enter costs to calculate your net profit.

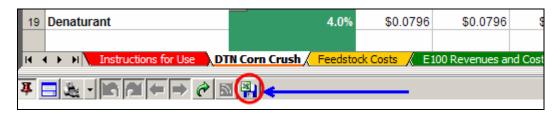
36	,	Net Profit Calculations								
30										
37	Planned Ethanol Production	Gallons (000s)	5000	5000	5000	5000	5000	5000	5000	5000
38	Total Expected Revenue	USD (000s)	\$12,687	\$12,396	\$12,641	\$12,160	\$11,125	\$11,085	\$11,025	\$10,871
39	Expected Total Gross Margin	USD (000s)	\$4,883	\$4,582	\$4,813	\$4,153	\$3,103	\$3,047	\$2,878	\$2,713
40		Enter Total Operating Costs (000 USD)								
41	Labor and Management Costs Gneral Operating Expenses	\$2,800	\$233	\$233	\$233	\$233	\$233	\$233	\$233	\$233
42	(Water, Maintenance, Waste, Other)	\$4,000	\$333	\$333	\$333	\$333	\$333	\$333	\$333	\$333
43	Transportation Costs (\$/Gallon)	\$0.200	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
44	Debt Service	\$7,800	\$650	\$650	\$650	\$650	\$650	\$650	\$650	\$650
45	Depreciation	\$8,000	\$667	\$667	\$667	\$667	\$667	\$667	\$667	\$667
46	User Defined Fixed Costs (000 USD/Year)	\$750	\$63	\$63	\$63	\$63	\$63	\$63	\$63	\$63
47	User Defined Variable Costs (\$/Gallon)	\$0.025	\$125	\$125	\$125	\$125	\$125	\$125	\$125	\$125
48	Total Fixed and Variable (Indirect) Operating Expenses	\$0.614	\$3,071	\$3,071	\$3,071	\$3,071	\$3,071	\$3,071	\$3,071	\$3,071
49	Net Profit USD (000s)		\$1,812	\$1,511	\$1,742	\$1,082	\$32	-\$23	-\$193	-\$358
50	Net Profit Per Gallon (USD)		\$0.362	\$0.302	\$0.348	\$0.216	\$0.006	-\$0.005	-\$0.039	-\$0.072

Generally, only Green or Yellow rows should be edited. The exception to that is the Blue rows entitled "What

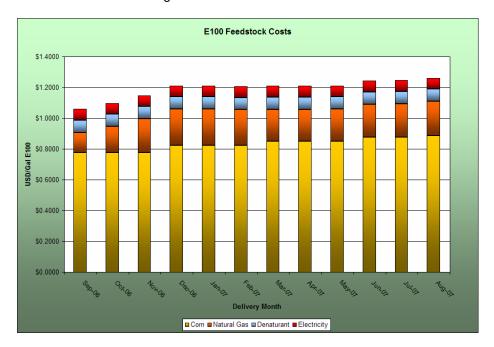


If..." These rows can be used to test your Gross Margin sensitivity based on unexpected changes in the price of Corn or Natural Gas. When using these rows to do What If analysis, the Corn and Natural Gas futures prices will be varied. Be careful to clear these Blue cells when you have completed your analysis and wish to return to Futures pricing.

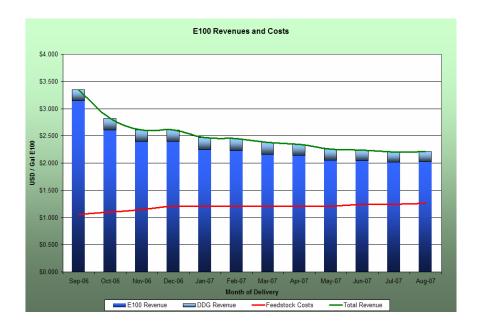
**To save changes in the Spreadsheet**, click on the Save Icon in the toolbar at the bottom of the window. Saving the ProphetX workbook will NOT save changes to the spreadsheet.



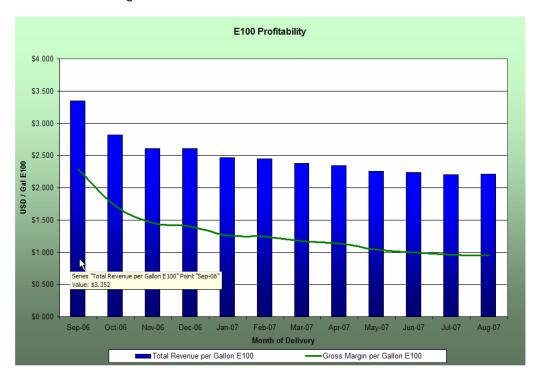
**Feedstock Costs** – This is a chart generated from the Normalized Feedstock Costs per Gallon Denatured E100 portion of the DTN Corn Crush Risk Management Tool.



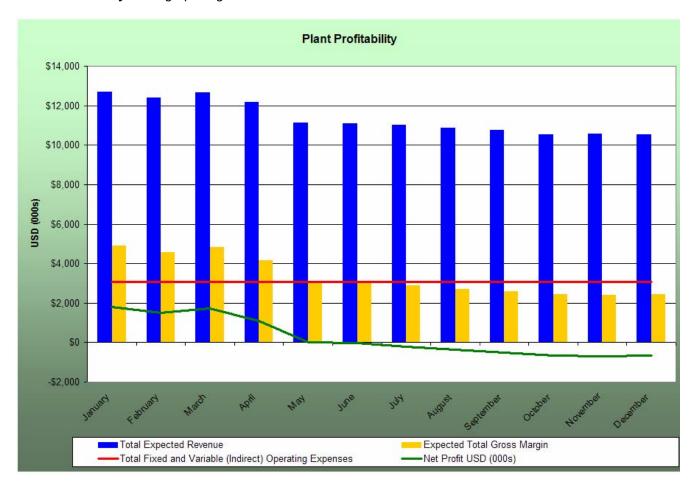
**E100 Revenues** – This chart was generated from Revenues in the Profitability per Gallon Denatured E100 section of the DTN Corn Crush Risk Management Tool.



**E100 Profitability** - This chart is based on the Total Revenue and Gross Margins in the Profitability section of the DTN Corn Crush Risk Management Tool.



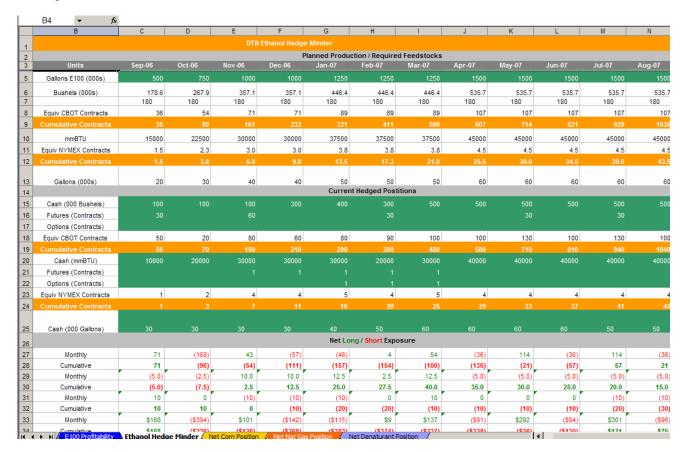
Plant Profitability – this graph is generated from the data in the Corn Crush worksheet.



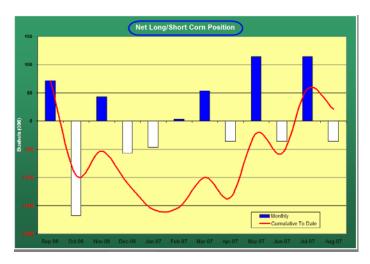
If you subscribed to the basic Ethanol Edition, the rest of this document is not applicable to you. The Hedge Minder, and Position pages are only available to the Ethanol Edition Pro subscribers.

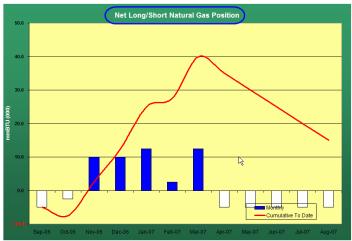
**DTN Ethanol Hedge Minder** – This spreadsheet displays your current and cumulative long/short exposure by allowing you to customize it with your own planned production requirements, purchases, and contracted product.

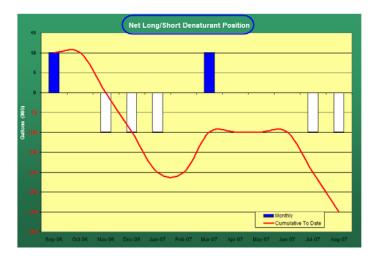
As with the Corn Crush page, you may change the contents of any green cell, but please don't change any other cell as it's tied to other information. One exception is the Gallons E100(row 5) you plan to produce each month is brought forward from the Corn Crush Net Profit Calculations Section.



Charts - Graphic representation of Net Long/Short Positions for Corn, Natural Gas and Denaturant.







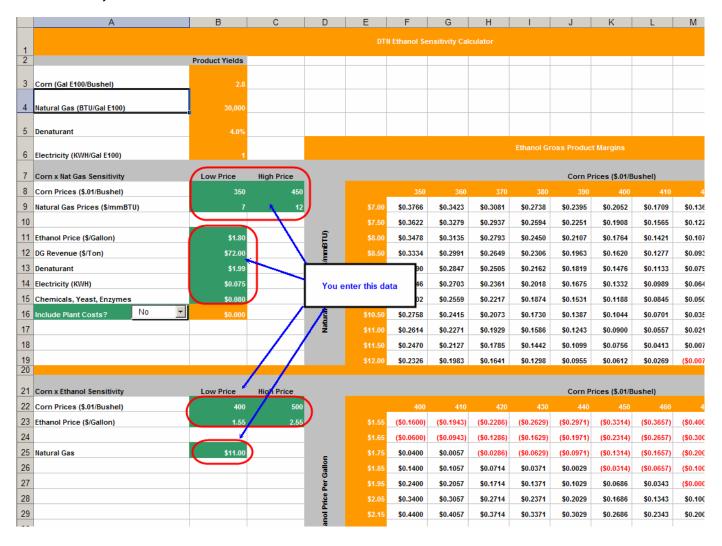
**DTN Ethanol Sensitivity Calculator** – calculates the sensitivity of margins to changing market conditions. Lines 3 – 6 are linked from the Corn Crush yields.

Lines 8-9 - Corn to Nat Gas Sensitivity - Enter the range of Corn and Natural Gas prices you would like to use in your analysis.

Lines 11 - 16 - Prices and costs that will remain unchanged for this analysis. Enter the price/cost you would like to use in lines 11 - 15.

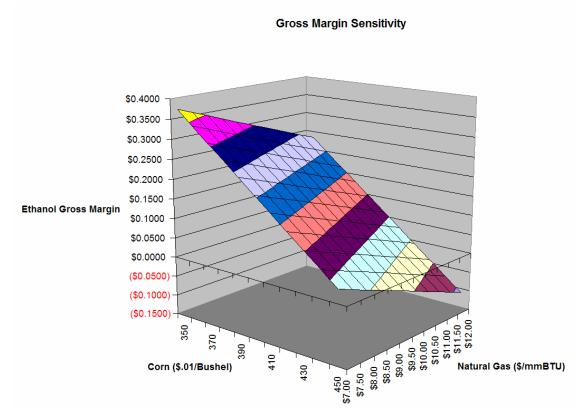
Line 16 – Select 'Yes' to include Plant Costs - this will bring in the total fixed and variable operating expenses for your operation (from the Corn Crush). This will help you see the break-even threshold.

Lines 22 – 25 - Corn to Ethanol Sensitivity – Enter the price ranges for Corn and Ethanol you would like to use. Enter the Natural Gas price you would like to remain constant during this analysis. The Corn and Ethanol Sensitivity includes the variables from lines 12-16.

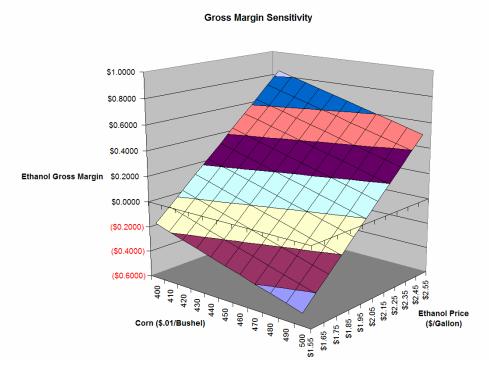


Ethanol Sensitivity charts – shows a graphic representation of your operation's sensitivity

### **Corn to Natural Gas:**



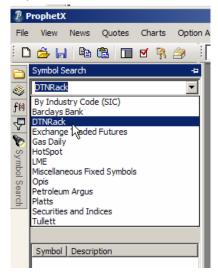
### **Corn to Ethanol:**



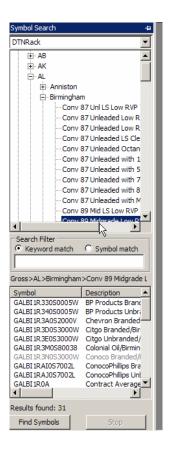
### Addendum A

## Displaying FastRacks for other locations:

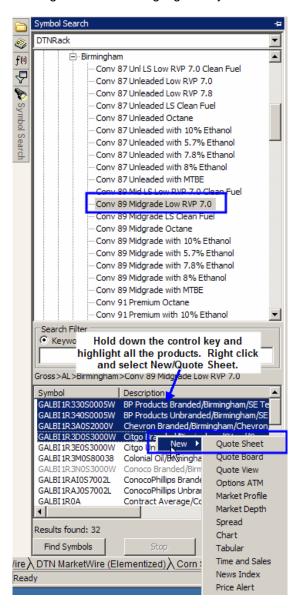
- 1. Click on the Symbol Search button on the left side of the ProphetX window. The symbol search dialog will open.
- 2. Click on the drop-down arrow in the <Select One> entry.



- 3. Highlight DTN Rack
- 4. Click on the + sign next to Gross or Net, depending on your specifications.
- 5. Click on the + sign next to the State abbreviation
- 6. Click on the + sign next to the City
- 7. Double-click on the product. The corresponding symbols will populate at the bottom of the search dialog.



- 8. Hold down the control key and click to highlight all the symbols you want to add to the quote sheet. (Symbols that are grayed out are currently not available.)
- 9. Right click on the highlighted symbols and select New/Quote Sheet.



If a new tab was not created, just click on the tab heading for the new Rack location and drag it to the current tabs in your screen.

10. If necessary, change the City, State, and descriptions as shown on the quote sheet.

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