

The Margin Protection Program Calculator (MPP-Dairy) has been developed to help evaluate the impact of participation decisions on dairy operations. Dairy producers opting for enrollment in the MPP-Dairy will have annual choices to make regarding coverage level and percentage of production history covered. This tool helps to simplify that decision with easy and accurate calculations. The tool is provided for information only. Users bear the sole responsibility for decisions affecting program participation and may want to consult other resources.

The decision tool is a web application that will run in all modern web browsers¹. There are several advantages to using web applications. One is that updates to the program can take place immediately, and another is that there is no need to download or install any software. We will update the application and may add features over time. So some screens may look somewhat different than what is seen in these instructions. We take your privacy very seriously and do not store any data you may enter into the calculator. You will find the application online at: <http://www.futurefordairy.com/mpp-calculator>

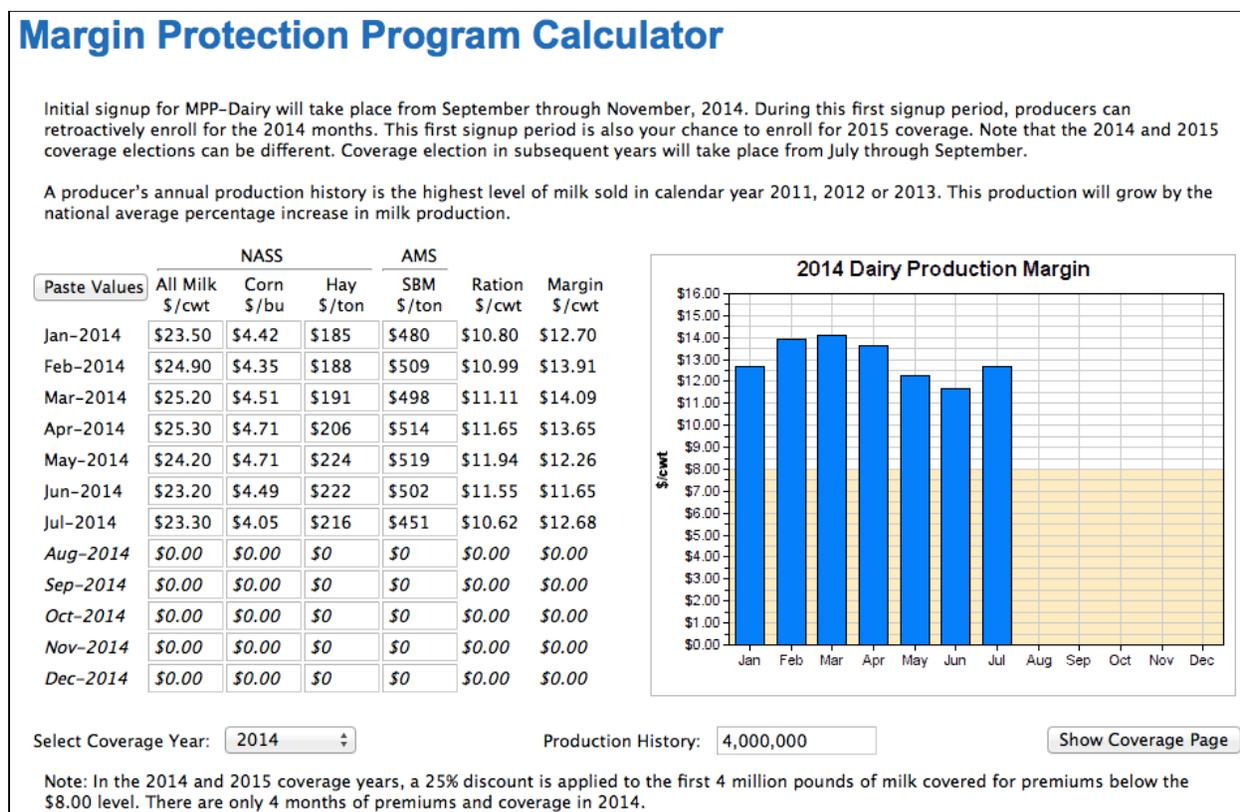


Figure 1. Margin Page.

There are just three screens to navigate with the calculator. The opening screen is simply a disclaimer statement to which you must agree before you can access the actual calculator. The first primary screen is the Margin Page which is shown in Figure 1. This screen will display historic data for the National Agricultural Statistics Service (NASS) All Milk Price, Price of Corn Received, and Price of Alfalfa Hay Received as well as the Agricultural Marketing Service

¹ Chrome, Firefox, Internet Explorer 8 (and above), and Safari. Internet Explorer 6 and 7 are supported with the Chrome Frame extension installed.

(AMS) Price of Soybean Meal (Central Illinois Rail Price). These values are used to calculate the MPP value of the ration and the margin between the All Milk price and the ration value.

You can select different historic years with the Select Coverage Year drop down box going back to 2000 and future years going forward to 2018. Doing so will change the values in the table to the corresponding values in the chosen year. The months in the current and future years which do not contain values are *italicized* and can be edited with your own data. You can enter your own estimates of milk and feed price data and the value of the ration and margin will be calculated for you.

If you keep a spreadsheet updated with your forecast values for milk and feed prices, there is a shortcut available for entering the data. You can simply copy these cells—including a date (Jan-15) and name field (milk, corn)—and paste them into the web application using the Paste Values button. This will drop down a text field where the copied values can be inserted (you can use either Control-V on your keyboard or click the Edit-Paste buttons with your mouse to paste). See Figure 2. It is not important that the date, name or prices be formatted in any particular way, what order the values are in, or that you copy the column headers, but a date must be included before each row for the calculator to know where to load your price data for that month. The calculator will automatically determine what the values are by their magnitudes. When done, press the “OK” button and the values will be added into the calculator for you. After being added to the calculator, these data can be edited by you in the calculator itself.

Margin Protection Program Calculator

Initial signup for MPP-Dairy v retroactively enroll for the 20 coverage elections can be dif

A producer's annual producti national average percentage

NASS

Paste Values	All Milk \$/cwt	Corn \$/bu
Jan-2014	\$23.50	\$4.42
Feb-2014	\$24.90	\$4.35
Mar-2014	\$25.20	\$4.51
Apr-2014	\$25.30	\$4.71
May-2014	\$24.20	\$4.71
Jun-2014	\$23.20	\$4.49
Jul-2014	\$23.30	\$4.05
Aug-2014	<i>\$0.00</i>	<i>\$0.00</i>
Sep-2014	<i>\$0.00</i>	<i>\$0.00</i>
Oct-2014	<i>\$0.00</i>	<i>\$0.00</i>
Nov-2014	<i>\$0.00</i>	<i>\$0.00</i>
Dec-2014	<i>\$0.00</i>	<i>\$0.00</i>

Date	All Milk	Hay	Corn SBM
Aug-14	\$22.00	\$220	\$4.00 \$450
Sep-14	\$21.00	\$225	\$3.90 \$440
Oct-14	\$20.00	\$230	\$3.85 \$435
Nov-14	\$19.00	\$235	\$3.75 \$445
Dec-14	\$18.00	\$235	\$3.50 \$450

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Copy your forecast date, milk and feed price values from a spreadsheet and paste them into the text area above. OK

	A	B	C	D	E
1	Date	All Milk	Hay	Corn	SBM
2	Aug-14	\$22.00	\$220	\$4.00	\$450
3	Sep-14	\$21.00	\$225	\$3.90	\$440
4	Oct-14	\$20.00	\$230	\$3.85	\$435
5	Nov-14	\$19.00	\$235	\$3.75	\$445
6	Dec-14	\$18.00	\$235	\$3.50	\$450
7					
8					

Select Coverage Year: 2014 Production History: 4,000,000 Show Coverage Page

Note: In the 2014 and 2015 coverage years, a 25% discount is applied to the first 4 million pounds of milk covered for premiums below the \$8.00 level. There are only 4 months of premiums and coverage in 2014.

Figure 2. Entering Price Data in Calculator.

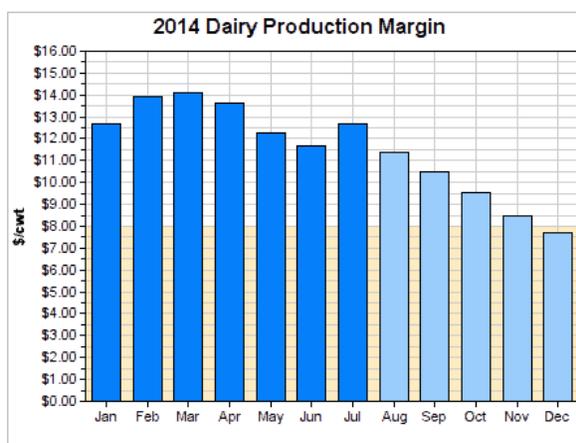
Margin values will be displayed in the graph on the right-hand side of the screen. Going back through time will let you see how the margin values have varied through the years. Margins calculated from your own data entries will be displayed in a lighter shade of blue. The tan colored zone on the bottom of the graph indicates the levels which can be protected by the MPP-Dairy (Figure 3).

Margin Protection Program Calculator

Initial signup for MPP-Dairy will take place from September through November, 2014. During this first signup period, producers can retroactively enroll for the 2014 months. This first signup period is also your chance to enroll for 2015 coverage. Note that the 2014 and 2015 coverage elections can be different. Coverage election in subsequent years will take place from July through September.

A producer's annual production history is the highest level of milk sold in calendar year 2011, 2012 or 2013. This production will grow by the national average percentage increase in milk production.

Paste Values	NASS			AMS	Ration \$/cwt	Margin \$/cwt
	All Milk \$/cwt	Corn \$/bu	Hay \$/ton	SBM \$/ton		
Jan-2014	\$23.50	\$4.42	\$185	\$480	\$10.80	\$12.70
Feb-2014	\$24.90	\$4.35	\$188	\$509	\$10.99	\$13.91
Mar-2014	\$25.20	\$4.51	\$191	\$498	\$11.11	\$14.09
Apr-2014	\$25.30	\$4.71	\$206	\$514	\$11.65	\$13.65
May-2014	\$24.20	\$4.71	\$224	\$519	\$11.94	\$12.26
Jun-2014	\$23.20	\$4.49	\$222	\$502	\$11.55	\$11.65
Jul-2014	\$23.30	\$4.05	\$216	\$451	\$10.62	\$12.68
Aug-2014	\$22.00	\$4.00	\$220	\$450	\$10.61	\$11.39
Sep-2014	\$21.00	\$3.90	\$225	\$440	\$10.50	\$10.50
Oct-2014	\$20.00	\$3.85	\$230	\$435	\$10.48	\$9.52
Nov-2014	\$19.00	\$3.75	\$235	\$445	\$10.51	\$8.49
Dec-2014	\$18.00	\$3.50	\$235	\$450	\$10.28	\$7.72



Select Coverage Year:

Production History:

[Show Coverage Page](#)

Note: In the 2014 and 2015 coverage years, a 25% discount is applied to the first 4 million pounds of milk covered for premiums below the \$8.00 level. There are only 4 months of premiums and coverage in 2014.

Figure 3. Margin Graph with Your Data Displayed.

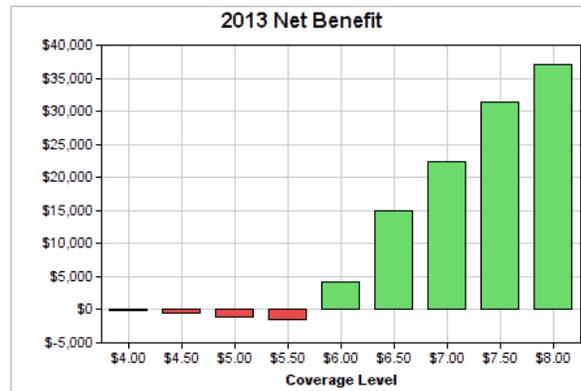
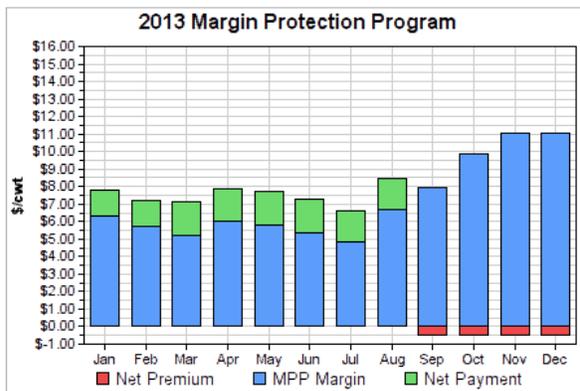
The button on the bottom-right of the screen will toggle between the Margin and the Coverage Pages of the calculator. The Coverage Page has four main sections (Figure 4). Starting with the bottom, there are control buttons where your selection of coverage level can be changed from the \$4.00 catastrophic coverage to a maximum of \$8.00 in 50¢ increments. You can also change the percentage of your production history that you want to cover (from 25% to 90% in 5 percent increments). And, you can alter the Coverage Year that you are looking at and can alter your Production History.

For most farms, your production history will be the highest level of milk sales in the 2011, 2012 or 2013 calendar years. If your farm did not have milk production in those years, then a production history will be estimated for you by the Farm Service Agency. Your Actual Production History will not change over the life of the farm bill (through 2018). However, the amount of milk production that you can cover will be increased by the U.S. milk production percentage increase in the previous year. For example, if your actual production history was 4 million pounds of milk

produced in 2012, this is the amount used in the calculation for the 2014 production year². The Farm Service Agency calculates that milk production in the U.S. increased by a rate of 1.0087, so the amount of milk you can cover in 2015 will be 25-90% of 4,034,800 pounds.

Margin Protection Program Calculator

Coverage Level	\$4.00	\$4.50	\$5.00	\$5.50	\$6.00	\$6.50	\$7.00	\$7.50	\$8.00
Participation Cost	(\$100)	(\$460)	(\$1,000)	(\$1,540)	(\$2,080)	(\$3,340)	(\$7,912)	(\$10,900)	(\$17,200)
MPP Payment	\$0	\$0	\$0	\$0	\$6,305	\$18,270	\$30,270	\$42,270	\$54,270
Net Benefit	(\$100)	(\$460)	(\$1,000)	(\$1,540)	\$4,225	\$14,930	\$22,358	\$31,370	\$37,070



You have elected coverage on 3,600,000 pounds of milk at the \$8.00 level.

Select Coverage Level:

Select Coverage Percentage:

Select Coverage Year:

Production History:

[Show Margin Page](#)

Figure 4. Coverage Page.

The table at the top of the Coverage Page shows the premiums and the administrative fees for the percentage of production history covered. This is referred to as the Participation Cost. The MPP Payment line shows you the amount of payments that would be made at the different coverage levels and the bottom line is the Net Benefit—the difference between the two.

The graph on the bottom-left displays the MPP margin in the blue bars and will show any payments in green bars and the net premium owed in red bars. Any months with adequate payments will net out the cost of the premium so red bars may not show in those months. This graph gives you a good idea of the income smoothing effect that can be achieved with the MPP-Dairy especially in low margin years.

The graph on the bottom-right is just a depiction of the Net Benefit line in the table for the various coverage levels.

Users are encouraged to go back over time and employ different strategies. Look at various coverage levels and see what difference that would have made to your dairy operation.

² Note that you can only cover the last four months of 2014 which is 1/3 of the total months of the year. With the 4 million pound production history example, that is 1.333 million pounds of milk.