

Canadian Grid Pricing Calculator and Examples

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This is the second of two reports from the National Beef Industry Development Fund project on pricing to value. The first is *Canadian vs. U.S. Fed Cattle Pricing and Marketing Practices and Viewpoints*. The first report compares several aspects of pricing and marketing fed cattle between the U.S. and Canada. In addition, it notes many similarities in perceptions by cattle feeders in the two countries regarding marketing and pricing issues and potential policy alternatives.

This companion report describes a grid pricing calculator developed for Canadian cattle feeders and based on a similar one for U.S. cattle feeders (Ward 2002). Other relevant material related to grid pricing in the U.S. but which is largely relevant to Canadian cattle feeders also can be found at <http://pods.dasnr.okstate.edu/docushare/dsweb/View/Collection-236>

- F-557, *Fed Cattle Pricing: Grid Pricing Basics*, 2001
- F-560, *Grid Pricing of Fed Cattle: Base Prices and Premiums-Discounts*, 2001
- F-561, *Grid Pricing of Fed Cattle: Risk and Information*, 2001
- F-587, *Carcass Discounts and Grid Pricing Implications*, 2004
- F-594, *Producer Signals and Incentives from Grid Pricing*, 2004
- F-604, *Grid Pricing Usage by Cattle Feeders*, 2005.

This report describes a Microsoft Excel spreadsheet designed to teach several aspects of grid pricing and its implications. The spreadsheet is referred to as *GridCalcCdn*. In essence, *GridCalcCdn* allows users to enter data on actual (or hypothetical) grids and actual (or hypothetical) carcass traits, and see the resulting premiums, discounts, and net price. It allows two levels of data input aggregation, individual carcass data and pen-level carcass data. Users also can use the spreadsheet to estimate the value of feeder cattle when using fed cattle price grids.

GridCalcCdn is available at <http://agecon.okstate.edu/pricing/publications.asp> or can be obtained upon request for no charge from the author (clement.ward@okstate.edu).

***GridCalcCdn* Description**

There are multiple ways to calculate net grid prices (i.e., base price plus carcass premiums and discounts). Two simple methods of arriving at the same net grid price are incorporated into *GridCalcCdn*. Users need to be aware that this calculator does *not* enable evaluating many grid pricing systems found in the industry. In all three sheets of the spreadsheet, cells requiring data from the user are highlighted in yellow. The spreadsheet comes with a default or base example in it. Thus, users not wanting to change some cells can treat them as default values. Users are encouraged to save the original version of the spreadsheet and treat it as a “backup”. Then users can make whatever changes are desired in the spreadsheet copy without disturbing the original

version. If cells and formulas are altered, the user can revert to the original, copy it to another “working copy” file and begin again. Examples of the three sheets are shown in this report as Figures 1, 2, and 3, respectively.

The top portion of the first two sheets (Figures 1 and 2) is similar. However, sheet one (labeled IndCarc) requires data on individual carcasses, while sheet two (labeled AggCarc) requires only a summary or aggregation of carcass data. Packers may provide individual carcass data but may only provide the summary or aggregated data.

On both sheets, users are asked to provide the base price. This may be known or may only be estimated, especially if cattle are sold on a formula basis. In either case the base price on a dressed or carcass (rail) weight basis is required. All prices, including premiums and discounts are in \$/dressed cwt. Users also enter the number of head in the sale lot. To the right on both sheets are one or two cells which act as checks on total carcasses to ensure the correct number of carcasses have been entered correctly elsewhere on the sheet.

The next section is similar both for sheets one and two. It summarizes the premiums, discounts, net premium or discount, and net price. With either level of carcass data and method of calculating the net price, the net price is the same. However, the sum of carcass premiums and discounts differs due to the arithmetic process for calculating the net price. Exact premiums and discounts are calculated in sheet one (IndCarc), the sheet that requires the most detailed carcass data.

IndCarc sheet (Figure 1) - Further down the IndCarc sheet is a matrix or grid with cells highlighted. These cells require entering the quality grade and yield grade premiums from a packer grid (or a hypothetical grid). The grid assumes the base type of carcass is a Canada AA quality grade, yield grade 2 carcass. Thus, the quality grade premiums and discounts are relative to Canada AA quality grade. Similarly, the yield grade premiums and discounts are relative to yield grade 2. One row is for Program quality carcasses. This might be referred to as CAB or Certified Angus Beef carcasses or a branded beef program of a specific packer. However, some grids may refer to them more generically as carcasses in some portion (such as upper half or upper 2/3) of the AAA grade range. After entering the premiums and discounts, the spreadsheet completes the premium-discount grid or matrix. Both methods of calculating the net price assume cells in the grid are additive. Thus, a \$12.00/cwt. premium for AAA carcasses and a \$3.00/cwt. premium for yield grade 1 carcasses, adds to a \$15.00/cwt. premium for AAA, yield grade 1 carcasses. Users also enter discounts for lighter and heavier carcasses and for “out” or heavily discounted carcasses. Note that some grids are not additive. Also, some packers will not allow a second discount on already-discounted carcasses. For example, a carcass discounted for quality grade or yield grade reasons might also be discounted because of its weight. This calculator is not designed for a any specific packer’s grid. The exact nature of the grid and double discount would have to be known.

Further down sheet one (Figure 1) is another matrix or grid with all cells highlighted. This is where individual carcass data are required. Users must enter the number of carcasses falling into each cell of the carcass characteristics grid or matrix. If the number of carcasses in the “check”

Figure 1. Grid Pricing Spreadsheet: Individual Carcass Data (Data entry cells are highlighted.)

Base price	\$/cwt	140.00		
Lot size	Head	125	Total carcasses check	125

Premiums	\$/cwt	
Quality grade, Yield grade		
Sum		6.70
Discounts	\$/cwt	
Quality grade, Yield grade		-1.10
Weight		-0.32
Other		-0.32
Sum		-1.74
Net premium/discount	\$/cwt	4.97
Net price	\$/cwt	144.97

Packer Grid Premiums and Discounts (\$/cwt)

Quality grade	Yield grade		
	1	2	3
Prime	15.00	12.00	2.00
Program	15.00	12.00	2.00
AAA	15.00	12.00	2.00
AA	3.00	0.00	-10.00
A	3.00	0.00	-10.00
B1 or lower	-17.00	-20.00	-30.00

Weight discount	\$/cwt	
Less than 550 lbs		-5.00
More than 950 lbs		-15.00
Other discounts	\$/cwt	
Outs		-20.00

Figure 1. Grid Pricing Spreadsheet: Individual Carcass Data (Data entry cells are highlighted.)

Carcass Distribution (number of head)		Yield grade			
Quality grade		1	2	3	Total
Prime		5	2	1	8
Program		8	3	1	12
AAA		18	15	3	36
AA		36	12	5	53
A		5	5	3	13
B1 or lower		1	2	0	3
	Total	73	39	13	125

Weight	Less than 550 lbs	2	Live weight (lbs)	1250
	More than 950 lbs	2	Carcass weight (lbs)	780
Other	Outs	2	Dressing %	62.4

Carcass Premiums and Discounts (\$/cwt)		Yield grade		
Quality grade		1	2	3
Prime		0.60	0.19	0.02
Program		0.96	0.29	0.02
AAA		2.16	1.44	0.05
AA		0.86	0.00	-0.40
A		0.12	0.00	-0.24
B1 or lower		-0.14	-0.32	0.00

Weight	Less than 550 lbs	-0.08
	More than 950 lbs	-0.24
Other	Outs	-0.32

cell differs from the entered number for lot size, then there is an error in the number of carcasses entered by grade and yield grade. Below the matrix are cells for entering the number of light or heavy carcasses, "out" carcasses, and the live weight and dressed (carcass) weight of the sale lot. If only the sum of carcasses in quality grade rows and yield grade columns is known, then users should use sheet two (AggCarc) instead of sheet one (IndCarc).

That completes data entry for sheet one. Further down the sheet is a matrix and cells showing the premium or discount in each cell of the grid or matrix. This is calculated from the premium or discount in each cell of the premium-discount grid and number of carcasses (converted to percentage of the sale lot total) in the carcass distribution grid.

AggCarc (Figure 2) - Sheet two requires similar but less detailed data from the user. First is a similar section as in sheet one requiring the base price and number in the sale lot. Below that is a similar section as in sheet one that shows the sum of premiums, discounts, net premiums or discounts, and net grid price. Below that is the grid entry section which differs from sheet one. In sheet two (Figure 2), premiums and discounts are entered in a column of cells, rather than in a matrix or grid framework. The same data are entered as for sheet one; for example, premiums for Prime, Program, and AAA carcasses and for yield grade 1 carcasses, and discounts for A and B1 or lower carcasses and for yield grade 3 carcasses. There is an identical section in which to enter weight discounts and “out” discounts as in sheet one.

To the right of the grid entry cells, is another column in which to enter carcass characteristics. Carcass data for these cells are the sum of carcasses for each quality grade and yield grade. Users might note that the default values in sheet two are the row and column totals from the default carcass distribution matrix of sheet one. Again, similar to sheet one, if the number of carcasses in the “check” cells at the upper right of the sheet differs from the entered number for lot size, then there is an error in the number of carcasses entered by grade and yield grade. As with sheet one, below the data entry columns is a column of cells in which to enter the number of light or heavy carcasses, “out” carcasses, and the live weight and dressed (carcass) weight of the sale lot.

That completes data entry for sheet two. Further down the sheet is a matrix and cells showing the premium and discount in selected cells of the grid or matrix. Because of the arithmetic process employed, only premiums and discounts on the AA row and yield grade 2 column are shown. These are calculated from the premium or discount in each row and column of the premium-discount grid and number of carcasses (converted to percentage of the sale lot total) in the rows and columns of the carcass distribution matrix. Use of row and column totals rather than each cell of the carcass distribution matrix is why the sum of premiums and discounts differs between sheets one and two.

Grid Calculator Uses

There are several potential uses for this *GridCalcCdn* spreadsheet. Users are encouraged to make a “backup” file and to save the many “what if” scenarios with a copied spreadsheet file. This saves the original version. The copy can be used for whatever purpose the user chooses. If cells and formulas are altered, the user can revert to the original, copy it to another “working copy” file and begin again.

One use for the spreadsheet involves enabling a cattle producer to estimate premiums, discounts, and net price for his/her expected carcass characteristics and alternative grids. For example, producers may want to assess differences in premium totals, discounts totals, and the net price with alternative grids. This may entail specific grids or grid types (such as a quality-oriented grid or yield-oriented grid). Which grid could be expected to return the most money for his/her cattle? What changes in genetics or management might be necessary to better fit cattle to a specific grid? These “what ifs” may be based on known carcass characteristics and known grids or assumed carcass characteristics and assumed grids.

Figure 2. Grid Pricing Spreadsheet: Aggregated Carcass Data. (Data entry cells are highlighted.)

Base price	\$/cwt	140.00		
Lot size	Head	125	Total carcasses check 1	125
			Total carcasses check 2	125
Premiums	\$/cwt			
Quality grade, Yield grade				
Sum			7.13	Note: Not exact sum of premiums.
Discounts	\$/cwt			
Quality grade, Yield grade			-1.52	
Weight			-0.32	
Other			-0.32	
Sum			-2.16	Note: Not exact sum of discounts.
Net premium/discount	\$/cwt		4.97	Note: Correct net.
Net price	\$/cwt		144.97	

Packer Grid Premiums and Discounts	
Quality grade	(\$/cwt.)
Prime	12.00
Program	12.00
AAA	12.00
AA	0.00
A	0.00
B1 or lower	-20.00

Carcass Distribution	
Quality grade	(head)
Prime	8
Program	12
AAA	36
AA	53
A	13
B1 or lower	3

Yield grade	
1	3.00
2	0.00
3	-10.00

Yield grade	
1	73
2	39
3	13

Weight discount	\$/cwt
Less than 550 lbs	-5.00
More than 950 lbs	-15.00
Other discounts	\$/cwt
Outs	-20.00

Weight	
Less than 550 lbs	2
More than 950 lbs	2
Other	
Outs	2

Live weight (lbs)	1250.0
Carcass weight (lbs)	780.0
Dressing %	62.4

Revenue 1130.75

Figure 2. Grid Pricing Spreadsheet: Aggregated Carcass Data. (Data entry cells are highlighted.)
Continued

Carcass Premiums and Discounts (\$/cwt)		Yield grade		
Quality grade		1.00	2.00	3.00
Prime			0.77	
Program			1.15	
AAA			3.46	
AA		1.75	0.00	-1.04
A			0.00	
B1 or lower			-0.48	
Weight	Less than 550 lbs		-0.08	
	More than 950 lbs		-0.24	
Other	Outs		-0.32	

Similarly, a producer might wish to estimate how a change in genetics or management might change (or might have changed) the net price in a grid sale. For example, given a specific grid, what if a change in management such as sorting and selling cattle in groups would have eliminated discounted carcasses; for example, heavier carcasses, yield grade 3 carcasses, or “out” carcasses, etc.? What if changing herd bulls would increase the percentage of AAA, Program, or yield grade 1 carcasses?

Uses such as these can be accomplished with sheets one or two (Figures 1 and 2). Examples are given in a later section of this report. Sheet three (Figure 3, labeled BEPs in the spreadsheet) provides another type of use. Cattle feeders who use grid pricing, typically observe a wide range of carcass value in a pen of cattle. For an extreme example, a Prime grade, yield grade 1 carcass is worth many dollars per hundredweight more than a B1, yield grade 3 carcass. Therefore, when buying feeder cattle to place in the feedlot, the breakeven price for feeder cattle that could grade Prime, yield grade 1 at harvest is considerably higher than feeder cattle that will only grade B1, yield grade 3.

The BEPs sheet (Figure 3) is a simplified way to enter the value differences for a few quality grade and yield grade combinations of carcasses. Those fed cattle value differences plus alternative placement weights, ending weights, and costs of gain, enable calculating breakeven prices for feeder cattle that would eventually produce carcasses of the specified quality grade and yield grade combination.

In the top portion of sheet three (Figure 3), users can enter three alternative placement weights, three alternative costs of gain, and three alternative harvest end points (dressed weight and live weight). Below that is a column in which users enter dressed weight carcass values. These are a base price plus or minus a premium or discount associated with a specific combination of quality grade and yield grade. Default values in sheet three are from the base price and grid values in sheets one and two. For example, a base price of \$140/dressed cwt. is assumed. Then for Prime, yield grade 1 carcasses, a premium of \$15/cwt. is assumed, giving a value of \$155/cwt.

Figure 3. Grid Pricing Spreadsheet: Breakeven Analysis. (Data entry cells are highlighted.)

		Case 1	Case 2	Case 3
Placement weight	Lbs	400	600	800
Cost of gain	\$/lb	0.40	0.45	0.50
Dressed weight	Lbs	700	800	900
Live weight	Lbs	1100	1260	1420
Dressing percentage	%	63.64	63.49	63.38
Net price	\$/cwt	144.97		
Prime, Y1	\$/cwt	155.00		
AA, Y2	\$/cwt	140.00		
B1, Y3	\$/cwt	110.00		
		Case 1	Case 2	Case 3
Breakeven Price				
Net price	\$/cwt	183.70	143.79	124.34
Prime, Y1	\$/cwt	201.25	157.17	135.63
AA, Y2	\$/cwt	175.00	137.17	118.75
B1, Y3	\$/cwt	122.50	97.17	85.00

The bottom portion of the sheet shows the breakeven prices. This provides information on how breakeven prices change with changes in placement weights, harvest weights, and cost of gain changes, given the same carcass values.

Canadian Grid Premiums and Discounts

Considerable useful information is available in the U.S. regarding grid premiums and discounts offered by packers. The Agricultural Marketing Service, U.S. Department of Agriculture, publishes a weekly report of average grid premiums and discounts and the range across several packers for steers and heifers (<http://marketnews.usda.gov/portal/lg>). This report has enabled tracking key premiums and discounts over time to determine seasonal patterns and trends.

No comparable report exists in Canada. Therefore, to develop the grid calculator described in this report and present examples for Canadian cattlemen, information was sought in a national survey of Canadian cattle feeders. Much of the information for the first of the two reports from this pricing to value project came from the survey. Two questions in the survey were not discussed in that first report, but are part of this report.

Cattle feeders were asked to provide from recall or records the premiums and discounts for carcass quality and yield grades and other carcass traits prior to the Canadian-U.S. border closing in 2003. Grid premiums and discounts were requested for fed cattle marketed in the spring months (predominantly calves) and in the fall months (predominantly yearlings). The survey data were helpful but also difficult to summarize. The response to these questions was quite low and the response for individual premium and discount categories was quite variable.

A sample grid was developed from the survey data (Table 1) for use in the subsequent examples. This sample grid likely does not represent any grid used by a packer purchasing cattle in Canada. The intent is to use this sample grid with several sets of carcass data. Note the default grid in *GridCalcCdn* differs from what is used in examples below.

Table 1. Sample Premium-Discount Grid Based on Survey of Canadian Cattle Feeders.

	<u>Premium</u>	<u>Discount</u>
	(\$/dressed cwt.)	
Quality Grade		
Prime	14.00	
Program	12.00	
AAA	10.00	
AA	Base	Base
A		-5.00
B1 or lower		-15.00
Yield Grade		
1	4.00	
2	Base	Base
3		-5.00
Weight		
< 550 lbs		-20.00
550-950 lbs	Base	Base
>950 lbs		-30.00
Outs		-30.00

Calf Examples

A cooperating feedlot in Canada supplied carcass data for five sale lots of calf-fed cattle. No grid or price data was requested or supplied. The request was for carcass data representing a poor pen of cattle, three pens of average cattle, and a pen of good cattle. The feedlot staff chose the five pens with no further guidelines. Carcass characteristics associated with each of the five pens of cattle are shown in Table 2.

Grid premiums and discounts shown in Table 1 were combined with carcass data from Table 2 in the *GridCalcCdn* AggCarc sheet (Figure 2). All examples used a common base price (\$140.00/cwt.). A summary of the results for each of the five pens of cattle are shown in Table 3.

Table 2. Carcass characteristics for selected pens of calf-fed cattle

	Pen 1 Good	Pen 2 Average	Pen 3 Average	Pen 4 Average	Pen 5 Poor
Quality grade (number of head)					
Prime	0	2	0	4	4
Program	13	71	23	200	63
AAA	55	67	70	252	110
AA	160	62	64	327	56
A	5	0	0	7	0
B1 or lower	0	0	0	0	1
Yield grade (number of head)					
1	200	107	56	471	53
2	29	61	70	283	111
3	4	34	31	36	70
Weight (number of head)					
< 550 lbs	0	0	0	1	0
550-950 lbs	233	202	156	786	219
>950 lbs	0	0	1	3	15
Outs (number of head)	0	0	0	0	1
Average dressed weight (lbs)	804	797	790	784	834
Dressing percent (%)	61.2	60.7	61.1	61.4	61.0
Number of head	233	202	157	790	234

Pen 2, identified as an average pen, had the highest net grid price and highest premiums. It had the second highest revenue of the five pens. Its premiums came from a combination of having 68.3% of the carcasses grade Program and AAA and 52.9% yield grade 1.

Pen 1, identified as the good pen of cattle, received the lowest premiums though also was discounted the least. Two-thirds of the carcasses (68.7%) graded AA so did not receive premiums or discounts. Premiums came primarily from having 85.8% of the pen yield grade 1.

Pen 5, identified as the poor pen, was the most variable, but had the highest revenue. It received the second highest premiums but also the largest discounts, so the net price was the lowest of the five pens. It was also the heaviest pen so revenue from the pen was the highest of the five pens. The large discounts were related to having 6.4% heavy carcasses, and having 1 B1 carcass and 1 “out” carcass.

Table 3. *GridCalcCdn* results for calf-fed cattle.¹

	Pen 1 Good	Pen 2 Average	Pen 3 Average	Pen 4 Average	Pen 5 Poor
Total premiums (\$/cwt.)	6.46	9.79	7.64	8.68	9.06
Total discounts (\$/cwt.)	-0.19	-0.84	-1.18	-0.41	-3.61
Net price (\$/cwt)	146.27	148.95	146.46	148.27	145.47
Revenue (\$/head)	1176	1187	1157	1162	1213

¹ Base price was \$140.00/dressed cwt.

One of the so-called average pens (Pen 4) fared well. It had considerable premiums due to having 57.2% Program and AAA carcasses along with 59.6% Y1 carcasses. And it had low discounts. Thus, it garnered the second-highest price.

It should be noted that with a different grid, results may change markedly. For example, a grid with higher premiums for Y1 carcasses would value pens 2-5 more than pen 1. Pen 1 clearly benefits from a quality oriented grid where value increases for a higher percentage of Prime, Program, and AAA carcasses.

Yearling Examples

A feedlot in Canada supplied carcass data for five sale lots of yearling-fed cattle. As before, no price or grid data were requested or supplied. The request was for carcass data representing a poor pen of cattle, three pens of average cattle, and a pen of good cattle. Carcass characteristics associated with each of the five pens of cattle are shown in Table 4.

Grid premiums and discounts shown in Table 1 were combined with carcass data from Table 4 in the *GridCalcCdn* AggCarc sheet. All examples again used a common base price (\$140.00/cwt.). A summary of the results for each of the five pens of cattle are shown in Table 5.

Pen 1, identified as good cattle, clearly had the highest sale price. This resulted from having the highest premiums and lowest discounts. Premiums came in part from having 88.4% of the pen grade Program and AAA and having 53.9% of the pen yield grade 1. Pen 1 also had the highest revenue per head but was not the heaviest pen of the five.

Pen 5, identified as poor cattle, did not quality grade well (50.4% were AA) and the pen had 5.2% heavy carcasses which were discounted. Also, 30.4% of the pen was discounted for being Y3 carcasses.

Table 4. Carcass characteristics for selected pens of yearling cattle

	Pen 1 Good	Pen 2 Average	Pen 3 Average	Pen 4 Average	Pen 5 Poor
Quality grade (number of head)					
Prime	3	1	1	8	3
Program	88	18	20	153	56
AAA	79	86	62	208	159
AA	19	239	222	161	224
A	0	40	34	1	2
B1 or lower	0	0	0	0	0
Yield grade (number of head)					
1	102	267	294	192	121
2	78	103	41	236	188
3	9	14	4	103	135
Weight (number of head)					
< 550 lbs	0	1	0	0	0
550-950 lbs	183	362	226	496	421
>950 lbs	6	21	13	35	23
Outs (number of head)	0	1	0	1	0
Average dressed weight (lbs)	843	845	839	854	848
Dressing percent (%)	60.1	61.0	60.5	59.7	59.7
Number of head	189	384	339	531	444

Table 5. GridCalcCdn results for yearling cattle.¹

	Pen 1 Good	Pen 2 Average	Pen 3 Average	Pen 4 Average	Pen 5 Poor
Total premiums (\$/cwt.)	12.15	5.62	6.05	9.03	6.28
Total discounts (\$/cwt.)	-1.19	-2.47	-1.71	-3.01	-3.10
Net price (\$/cwt)	150.96	143.15	144.35	146.02	143.18
Revenue (\$/head)	1273	1187	1213	1247	1215

¹ Base price was \$140.00/dressed cwt.

Pens 2, 3, and 4 were considered average cattle. These three pens included the heaviest pen (pen 4) and the two highest yielding pen (pens 2 and 3). The two highest yielding pens received considerable premiums for their high percentage of Y1 carcasses (69.5% and 86.7%, respectively) but neither pen garnered much premium for quality, having 62.2% and 65.4% AA carcasses, respectively. Each of the three average pens joined the so-called poorest pen in receiving sizeable discounts for heavy carcasses, from 3.8% to 6.6% of the carcasses.

Again, it should be noted that results would differ with different premium-discount grids. In fact, one important feature of *GridCalcCdn* is the ability to change premiums and discounts to see how a set of carcass data differs under alternative grid scenarios.

Summary and Conclusions

There are many different price grids for fed cattle and many different ways of calculating the net price for a pen of cattle. *GridCalcCdn* illustrates two simplified methods. However, *GridCalcCdn* does not contain any packer's specific grid. The spreadsheet is intended to enhance understanding of grid pricing along with potential changes in genetics and management that affect carcass performance. Users are encouraged to read available material on grid pricing in addition to using this spreadsheet. *GridCalcCdn* also can be used to better understand the value differences among feeder cattle that are expected to fall into specific quality and yield grade combinations at harvest.

Successful use of grids requires knowing ...

- Carcass characteristics of the cattle harvested and priced on a grid
- Understanding the grid and how it is calculated
- Understanding how the base price is determined
- Knowledge of how changes in genetics and management may change the net grid price outcome.

Ideally, *GridCalcCdn* can help producers learn more about grid pricing in order to use grid pricing more effectively.

References

Ward, Clement E. *Grid Pricing Calculator*. Oklahoma State University, Oklahoma Cooperative Extension Service, Facts F-577, July 2002.
<http://pods.dasnr.okstate.edu/docushare/dsweb/View/Collection-236>