

Risk Mitigation

What Are You Doing To Protect Your Farm?



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Increased volatility in all aspect of agriculture

- Business Risk Management Programs can help to take out the risk of these volatile issues
 - Commodity prices
 - Input prices – feed, fertilizer, and fuel
 - Environment – drought to flood
- Other Risks to manage
 - Interest rates
 - Land values
 - Equipment prices and increased maintenance costs

Available BRM Programs

- Business Risk Management (BRM) programs address a variety of risks:
 - **AgriStability**: large margin declines from commodity price declines, production losses and/or input cost increases
 - **AgriInvest**: smaller income declines
 - **AgriInsurance**: crop and forage production losses
 - **AgriRecovery**: extraordinary costs from disasters
- Currently, government priorities are to:
 - Improve AgriStability
 - Link programs to environmental outcomes

AgrilInvest

- No changes to program parameters
 - Producers receive a matching government contribution of 1% of Allowable Net Sales (ANS) up to \$10,000
- Producers with ANS of \$1 million or more will be required to have an Environmental Farm Plan (EFP) to get the government contribution
 - NEW: Complete an EFP online!
 - Visit www.ManitobaEFP.ca

AgriStability

- Compensation rate will increase from 70% to 80%
- Administrative changes are proposed to make AgriStability more:
 - Simple
 - Timely
 - Predictable

AgriStability - Simple

Value of Production Calculation

- Value of production to be calculated as production times price
 - Moving away from the current calculation of sales minus purchases, changes in inventory, payables & receivables

Reference Margin Calculation

- Producers filing income taxes on a cash basis would have a reference margin based on cash, not accrual
 - Eliminates need to submit inventory, payables, receivables info
- **New Signup**
- **Complete the New and rejoining participant information form**
- To enrol in AgriStability for the 2023 program year:
- Return the New and rejoining participant information form to us by April 30, 2023.

AgriStability – Timely and Predictable

Earlier Application Deadline

- Moving application deadlines to earlier dates allow for timelier processing and payments
 - Move up claim application deadline to April 30 (or June 30) from current September 30

Earlier Coverage Notices

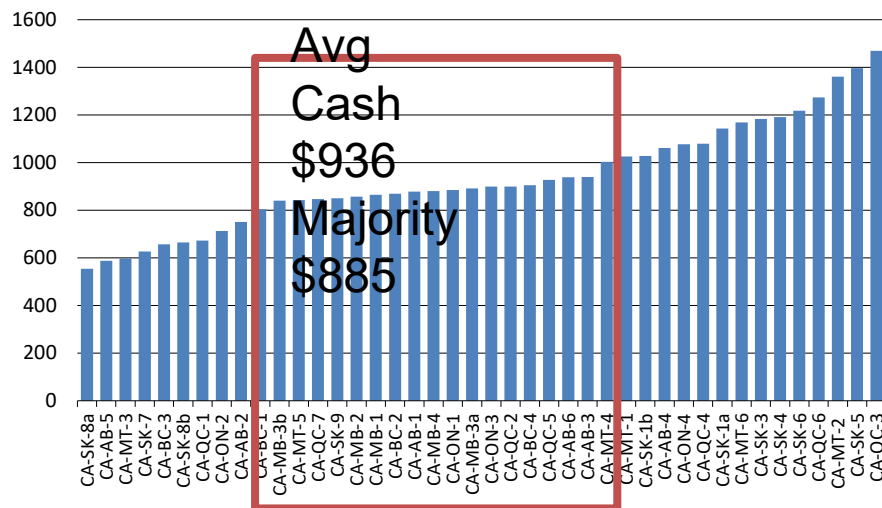
- If producers submit production plans for upcoming program year, then governments issue an earlier coverage notice showing a more accurate reference margin

AgrilInvest and AgriStability – Timelines

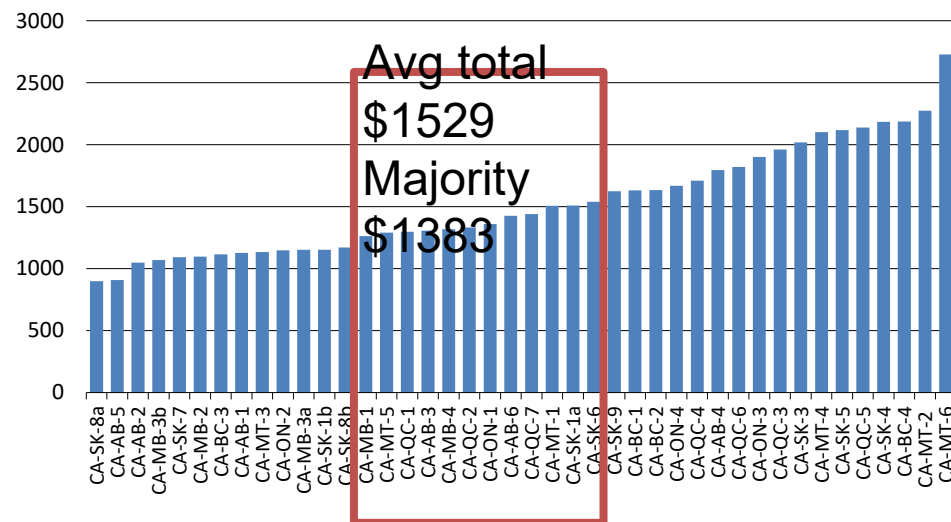
- The requirement for an EFP in AgrilInvest is expected to start as of the 2025 program year
 - Only for those with ANS of more than \$1 million
- The increase in the AgriStability compensation rate from 70% to 80% is scheduled for the 2023 program year
 - Expected to result in increased payments to Manitoba producers
- Other AgriStability changes expected to be partially implemented in 2023 and fully implemented in 2024

National COP Network

Cash Costs per cow

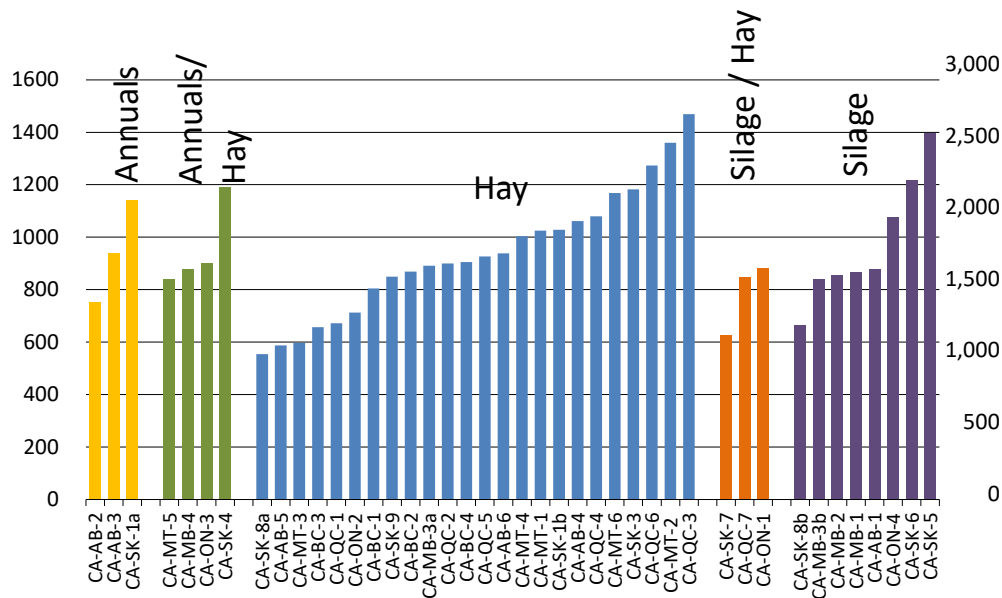


Total Costs per cow

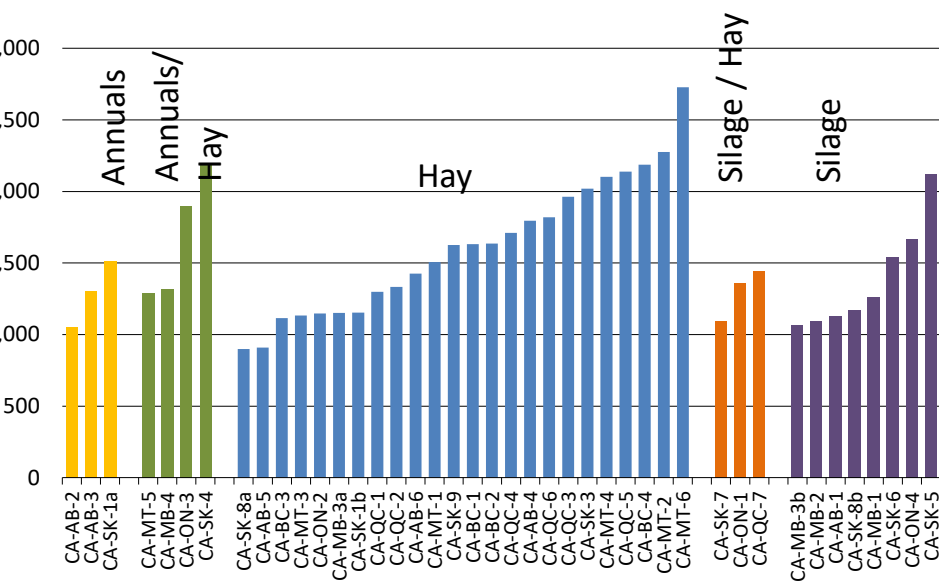


Costs by Winter Feed

Cash Cost per cow, 2021



Total Cost per cow, 2021



Agri-Insurance Forage

AgrilInsurance Analysis

[MASC Forage Region Map](#)
[MASC Forage Insurance](#)
Forage Region 1
Risk Area 4
Basic Hay
80% Coverage

Based on 2022 MASC data

**Low -
\$58/tonne**
**High -
\$97/tonne**
Alfalfa Grass - Select Hay
More Than 4 Year Stand
4 Years or Less Stand
**70%
Coverage**
**80%
Coverage**
**70%
Coverage**
**80%
Coverage**
Alfalfa - Select Hay
More Than 4 Year Stand
4 Years or Less Stand
**70%
Coverage**
**80%
Coverage**
**70%
Coverage**
**80%
Coverage**
Greenfeed
**80%
Coverage**

A.	Hay Acres	160	160	160	160	160	160	160	160	160	160
Coverage											
B.	Probable Yield - IC (tons/acre)	1.553	1.553	1.495	1.495	2.134	2.134	1.732	1.732	2.406	2.205
C.	Probable Yield (1,500 lb. bales/ac)	2.07	2.07	1.99	1.99	2.85	2.85	2.31	2.31	3.21	2.94
D.	Prob. Total No. of 1,500 lb. Bales	331	331	318	318	456	456	370	370	514	470
E.	Premium (\$/Acre)	\$3.27	\$5.28	\$5.25	\$7.87	\$5.25	\$7.87	\$7.58	\$11.24	\$7.58	\$21.77
F.	Premium (Total \$) = A x C	\$523	\$845	\$840	\$1,259	\$840	\$1,259	\$1,213	\$1,798	\$1,213	\$3,483
G.	Premium Cost (% of Insured) = E/M	5.0%	4.8%	3.4%	4.5%	2.4%	3.2%	3.6%	4.6%	2.6%	10.1%

Forage Coverage Calculation

Forage Region 1 Risk Area 4		Basic Hay 80% Coverage		Alfalfa Grass - Select Hay				Alfalfa - Select Hay				Greenfeed
				More Than 4 Year Stand		4 Years or Less Stand		More Than 4 Year Stand		4 Years or Less Stand		
		Low - \$58/tonne	High - \$97/tonne	70% Coverage	80% Coverage	70% Coverage	80% Coverage	70% Coverage	80% Coverage	70% Coverage	80% Coverage	80% Coverage
Based on 2022 MASC data												
Coverage Calculation												
H.	Coverage (tons/acre) = B x %	1.242	1.242	1.047	1.196	1.494	1.707	1.212	1.386	1.684	1.925	1.764
I.	Coverage (\$/ton)	\$52.62	\$88.00	\$146.06	\$146.06	\$146.06	\$146.06	\$175.99	\$175.99	\$175.99	\$175.99	\$122.50
J.	Coverage (1,500 lb. bales/acre)	1.66	1.66	1.40	1.59	1.99	2.28	1.62	1.85	2.25	2.57	2.35
K.	Coverage No. of 1,500 lb. Bales	265	265	223	255	319	364	259	296	359	411	376
L.	Coverage (\$/bale)	\$39.46	\$66.00	\$109.54	\$109.54	\$109.54	\$109.54	\$132.00	\$132.00	\$132.00	\$132.00	\$91.88
M.	Coverage (\$/acre) = H x I	\$65.35	\$109.29	\$152.92	\$174.68	\$218.21	\$249.32	\$213.30	\$243.93	\$296.37	\$338.79	\$216.09
N.	Coverage (Total \$) = A x M	\$10,456	\$17,487	\$24,467	\$27,949	\$34,913	\$39,891	\$34,129	\$39,028	\$47,420	\$54,206	\$34,574

Forage Indemnity Calculation

Forage Region 1	Basic Hay 80% Coverage		Alfalfa Grass - Select Hay				Alfalfa - Select Hay				Greenfeed
Risk Area 4			More Than 4 Year Stand		4 Years or Less Stand		More Than 4 Year Stand		4 Years or Less Stand		
	Low - \$58/tonne	High - \$97/tonne	70% Coverage	80% Coverage	70% Coverage	80% Coverage	70% Coverage	80% Coverage	70% Coverage	80% Coverage	80% Coverage
Based on 2022 MASC data											
Indemnity Calculation											
O. Avg. Forage Yield (bales/acre)	1.00		(0.75 tons/acre)								
P. Avg. Total No. of 1,500 lb. Bales	160	160	160	160	160	160	160	160	160	160	160
Q. Percent of Probable Yield	48%	48%	50%	50%	35%	35%	43%	43%	31%	31%	34%
R. Forage Indemnity (bales/acre) = J - O	0.66	0.66	0.40	0.59	0.99	1.28	0.62	0.85	1.25	1.57	1.35
S. Forage Indemnity (tons/acre) = H - O	0.492	0.492	0.297	0.446	0.744	0.957	0.462	0.636	0.934	1.175	1.014
T. Forage Indemnity (% of coverage)	39.6%	39.6%	28.4%	37.3%	49.8%	56.1%	38.1%	45.9%	55.5%	61.0%	57.5%
U. Est. Forage Indemnity (\$/acre) = I x S	\$25.89	\$43.29	\$43.38	\$65.14	\$108.67	\$139.78	\$81.31	\$111.93	\$164.38	\$206.79	\$124.22
V. Estimated Forage Indemnity = A x U	\$4,142	\$6,927	\$6,941	\$10,423	\$17,387	\$22,364	\$13,009	\$17,909	\$26,301	\$33,087	\$19,874
Hay Disaster Benefit Calculation											
x. Significant MB hay yield loss	Yes		(more than 20% of the producers insured by AgriInsurance have less than 50% of their long-term probable yield)								
y. Est. HDB (\$/acre) = S x \$39.92/ton	\$19.64	\$19.64	\$11.86	\$17.80	\$29.70	\$38.20	\$18.44	\$25.39	\$37.28	\$46.90	n/a
z. Est. Hay Disaster Benefit = A x Y	\$3,142	\$3,142	\$1,897	\$2,848	\$4,752	\$6,112	\$2,951	\$4,062	\$5,965	\$7,504	n/a
Total Indemnity + HDB											
A. Est. Indemnity + HDB (\$/acre) = U + Y	\$45.53	\$62.93	\$55.23	\$82.94	\$138.36	\$177.98	\$99.75	\$137.32	\$201.66	\$253.69	\$124.22
B. Est. Indemnity + HDB = V + Z	\$7,284	\$10,069	\$8,837	\$13,271	\$22,138	\$28,476	\$15,960	\$21,971	\$32,266	\$40,591	\$19,874

Costs not covered by Agri insurance

Forage Region 1		Basic Hay 80% Coverage		Alfalfa Grass - Select Hay				Alfalfa - Select Hay				Greenfeed
Risk Area 4				More Than 4 Year Stand		4 Years or Less Stand		More Than 4 Year Stand		4 Years or Less Stand		
*Based on 2022 MASC data	Costs Not Covered By AgriInsurance	Low - \$58/tonne	High - \$97/tonne	70% Coverage	80% Coverage	70% Coverage	80% Coverage	70% Coverage	80% Coverage	70% Coverage	80% Coverage	80% Coverage
	Operating Costs	\$150.13	\$106.18	\$62.55	\$40.79	\$0.00	\$0.00	\$54.19	\$23.56	\$0.00	\$0.00	\$42.42
	Operating & Fixed Costs	\$271.17	\$227.22	\$183.60	\$161.83	\$118.31	\$87.20	\$175.23	\$144.60	\$92.16	\$49.74	\$163.46
	Total Costs	\$302.37	\$258.42	\$214.80	\$193.03	\$149.51	\$118.40	\$206.43	\$175.80	\$123.36	\$80.94	\$202.46
	AgriInsurance Risk Ratio	(AgriInsurance Coverage / Cost)										
	Operating Costs	30%	51%	71%	81%	101%	116%	80%	91%	111%	127%	84%
	Total Costs	18%	30%	42%	48%	59%	68%	51%	58%	71%	81%	52%

Agri Insurance Silage

Forage Region 1		Barley Silage	Corn Silage	Alfalfa Grass Silage					
Risk Area 4				Basic Hay option		Select Hay option			
				80% Coverage		More Than 4 Year Stand		4 Years or Less Stand	
Based on 2022 MASC data		80% Coverage	80% Coverage	Low - \$23/tonne	High - \$38/tonne	70% Coverage	80% Coverage	70% Coverage	80% Coverage
A.	Silage Acres	160	160	160	160	160	160	160	160
Coverage									
B.	Probable Yield - IC (tons/acre)	5.141	13.885	3.142	3.142	3.024	3.024	4.318	4.318
C.	Premium (\$/Acre)	\$21.77	\$30.00	\$3.27	\$5.28	\$5.25	\$7.87	\$5.25	\$7.87
D.	Premium (Total \$) = A x C	\$3,483	\$4,800	\$523	\$845	\$840	\$1,259	\$840	\$1,259
E.	Premium Cost (% of Insured) = C/H	10.1%	3.3%	5.0%	4.8%	3.4%	4.5%	2.4%	3.2%
Coverage Calculation									
F.	Coverage (tons/acre) = B x %	4.113	11.108	2.514	2.514	2.117	2.419	3.023	3.454
G.	Coverage (\$/ton)	\$52.54	\$82.58	\$26.01	\$43.50	\$72.19	\$72.19	\$72.19	\$72.19
H.	Coverage (\$/acre) = F x G	\$216.09	\$917.30	\$65.40	\$109.38	\$152.85	\$174.68	\$218.18	\$249.35
I.	Coverage (Total \$) = A x H	\$34,574	\$146,768	\$10,464	\$17,501	\$24,456	\$27,949	\$34,909	\$39,896

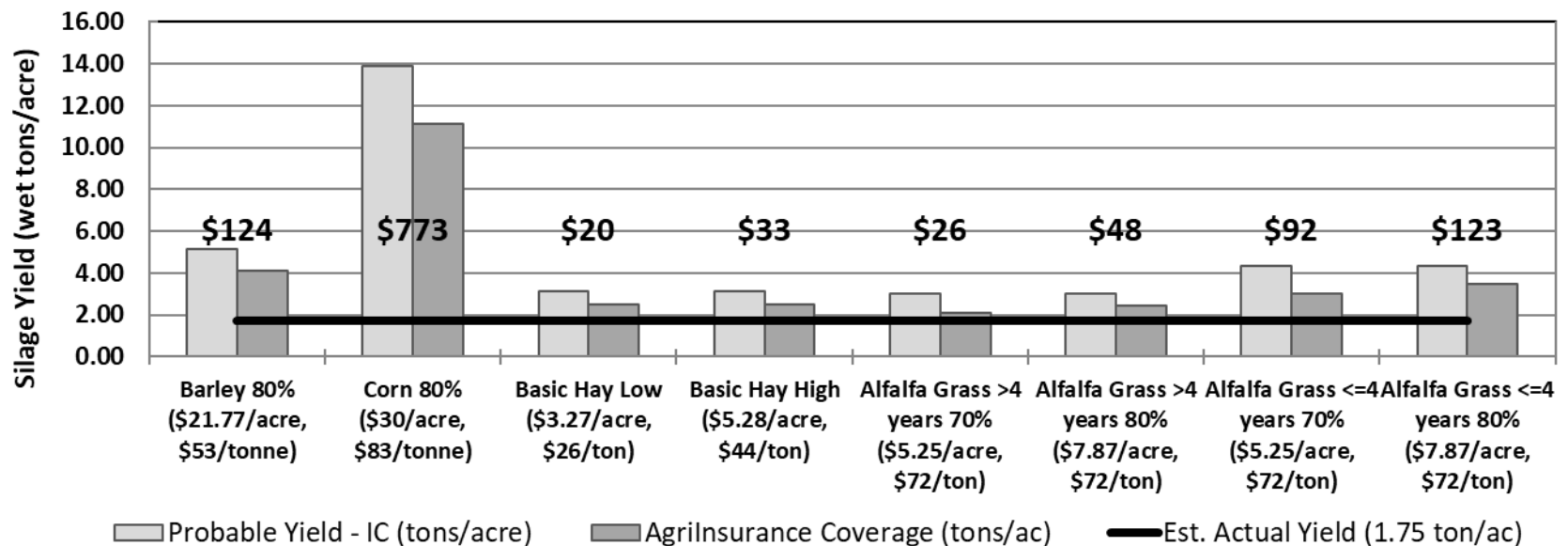
Silage Indemnity Calculation

Forage Region 1			Alfalfa Grass Silage					
Risk Area 4	Barley Silage	Corn Silage	Basic Hay option		Select Hay option			
			80% Coverage		More Than 4 Year Stand		4 Years or Less Stand	
	80% Coverage	80% Coverage	Low - \$23/tonne	High - \$38/tonne	70% Coverage	80% Coverage	70% Coverage	80% Coverage
Based on 2022 MASC data								
Indemnity Calculation								
Avg.Silage Yield (tons/acre)	1.75							
Avg. Total No. of tons	280	280	280	280	280	280	280	280
Percent of Probable Yield	34%	13%	56%	56%	58%	58%	41%	41%
Forage Indemnity (tons/acre) = F - J	2.363	9.358	0.764	0.764	0.367	0.669	1.273	1.704
Forage Indemnity (% of coverage)	57.5%	84.2%	30.4%	30.4%	17.3%	27.7%	42.1%	49.3%
Est. Forage Indemnity (\$/acre) = G x M	\$124.15	\$772.78	\$19.87	\$33.23	\$26.49	\$48.30	\$91.90	\$123.01
Estimated Forage Indemnity = A x O	\$19,865	\$123,645	\$3,179	\$5,317	\$4,239	\$7,727	\$14,704	\$19,682
Hay Disaster Benefit Calculation			(more than 20% of the producers insured by AgriInsurance have less than 50% of their long-term probable yield)					
Significant MB hay yield loss	Yes							
Est. HDB (\$/acre) = M x \$19.73/ton	n/a	n/a	\$15.07	\$15.07	\$7.24	\$13.20	\$25.12	\$33.62
Est. Hay Disaster Benefit = A x R	n/a	n/a	\$2,412	\$2,412	\$1,159	\$2,112	\$4,019	\$5,379
Total Indemnity + HDB								
Est. Indemnity + HDB (\$/acre) = O + R	\$124.15	\$772.78	\$34.95	\$48.31	\$33.73	\$61.49	\$117.01	\$156.63
Est.Indemnity + HDB = P + S	\$19,865	\$123,645	\$5,591	\$7,729	\$5,398	\$9,839	\$18,722	\$25,061

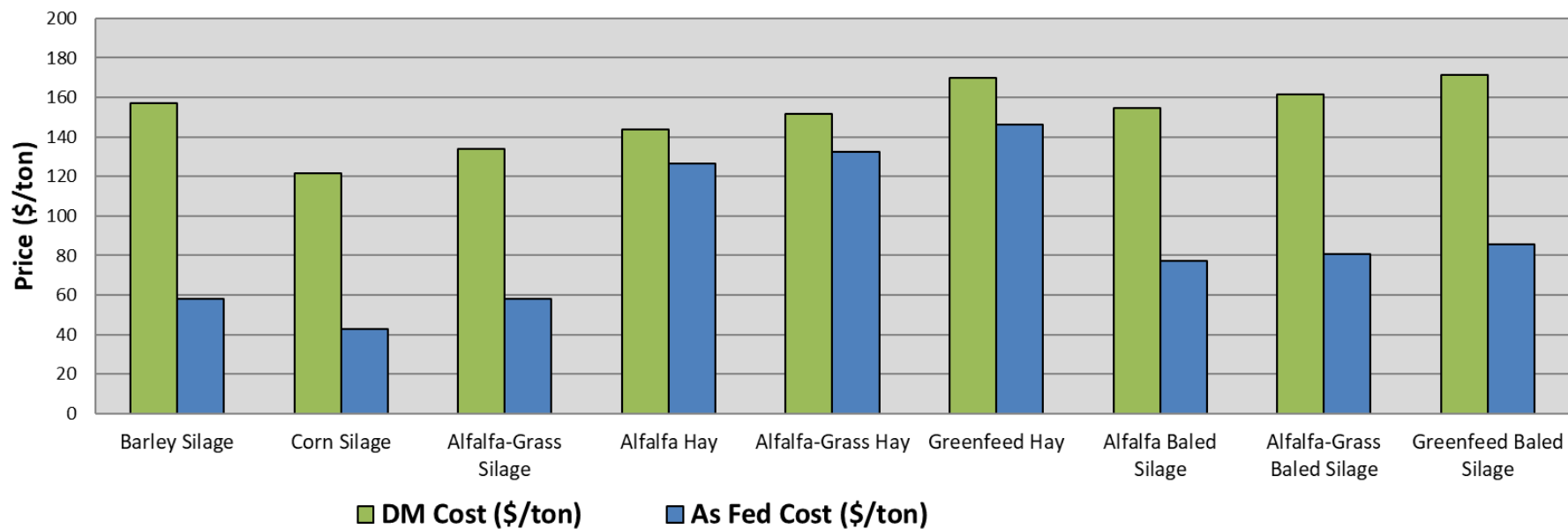
Agri Insurance Silage Cost not Covered

Forage Region 1			Alfalfa Grass Silage					
Risk Area 4	Barley Silage	Corn Silage	Basic Hay option		Select Hay option			
			80% Coverage		More Than 4 Year Stand		4 Years or Less Stand	
	80% Coverage	80% Coverage	Low - \$23/tonne	High - \$38/tonne	70% Coverage	80% Coverage	70% Coverage	80% Coverage
Based on 2022 MASC data								
Breakeven Calculation								
Est. Breakeven yield (tons/acre)	3.699	10.745	2.388	2.393	2.044	2.310	2.950	3.345
Costs Not Covered By AgrilInsurance								
Operating Costs	\$48.29	\$0.00	\$147.24	\$103.27	\$59.80	\$37.96	\$0.00	\$0.00
Operating & Fixed Costs	\$177.60	\$0.00	\$276.55	\$232.57	\$189.10	\$167.27	\$123.77	\$92.60
Total Costs	\$217.43	\$0.00	\$300.13	\$256.15	\$212.68	\$190.85	\$147.35	\$116.18
AgrilInsurance Risk Ratio			(AgrilInsurance Coverage / Cost)					
Operating Costs	82%	204%	31%	51%	72%	82%	103%	117%
Total Costs	50%	144%	18%	30%	42%	48%	60%	68%

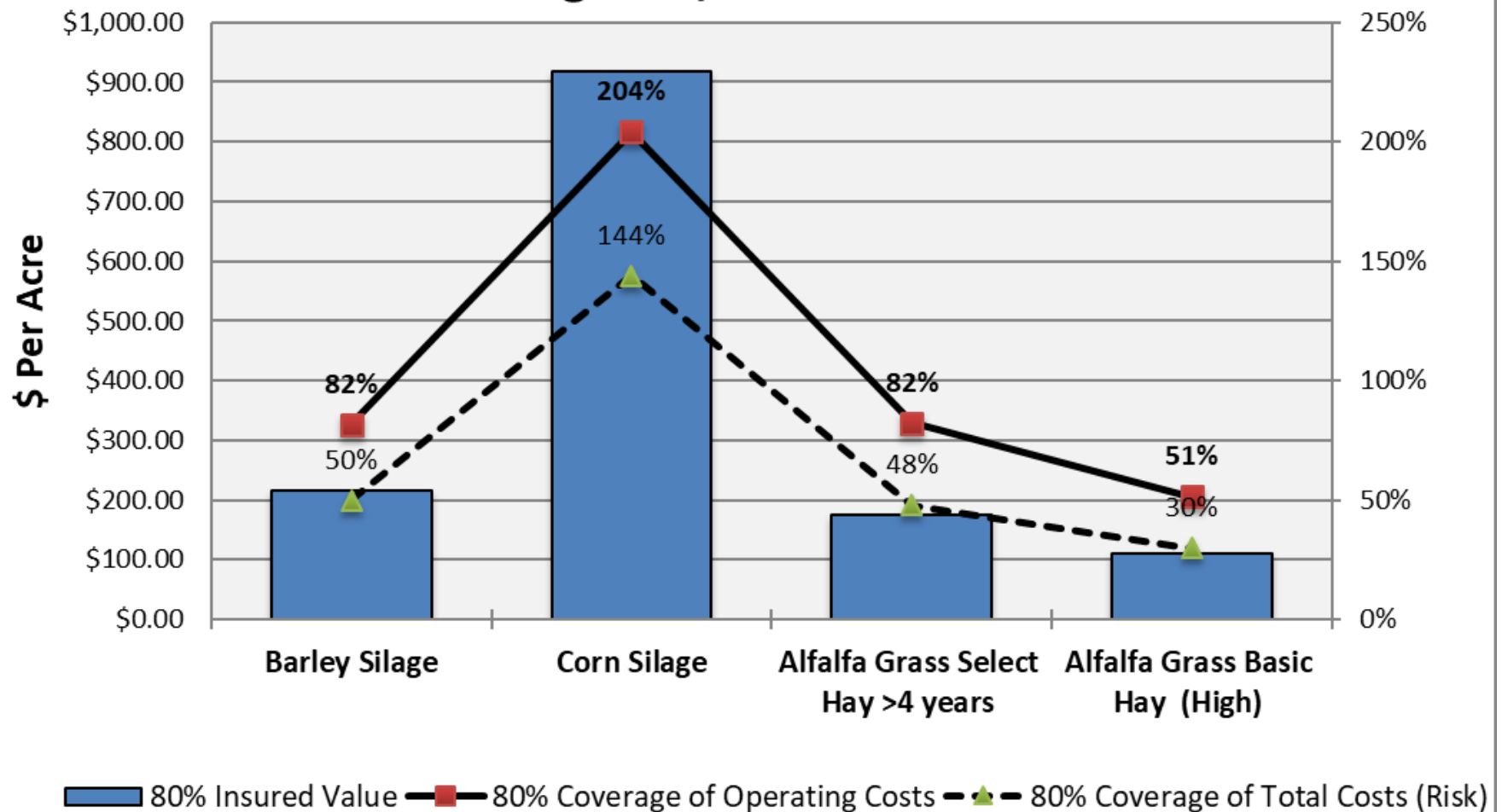
Forage Region 1 AgriInsurance Indemnity (\$ per acre) @ 1.75 Ton per Acre Yield



Forage Dry Matter vs. As Fed Cost Comparison



AgrilInsurance Risk Analysis - 2023 Manitoba - Forage Region 1/Risk Area 4



Summer Feed Production Risk Pasture Days Insurance

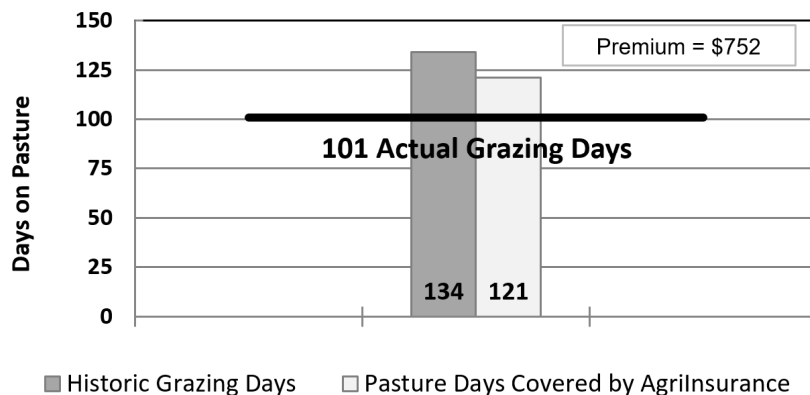
Coverage Calculation				
Animal Unit Days (190 AU x 134 days)		25,460	AU Days	
Pasture Guarantee (25,460 x 90% or 121 days)		22,914	AU Days	
Estimated Dollar Coverage (22,914 AU Days x \$2 per AU)		\$45,828.00		
Est. Avg. Coverage (\$/head/season) = (\$45,828 ÷ 146 head)		\$313.89		
Est. Avg. Coverage (\$/head/day) = (\$313.89 ÷ 134 days)		\$2.34		
Premium Calculation				
Premium = Expected number of Grazing Days x Animal Units x coverage Level x Insurable Value x Premium Rate %				
Premium = (134 x 190 X 90% x \$2 x 4.1%)		\$1,878.95		
Estimated Producer Premium = (\$1,878.95 x 40%)		\$751.58	(1.64 % of insuranc	
Est. Premium (\$/Acre) = (\$751.58 ÷ 800 acres)		\$0.94		
Est. Premium (\$/head/season) = (\$751.58 ÷ 146 head)		\$5.15		
Est. Premium (\$/head/day) = (\$5.15 ÷ 134 days)		\$0.0384		

Summer Feed Production Risk

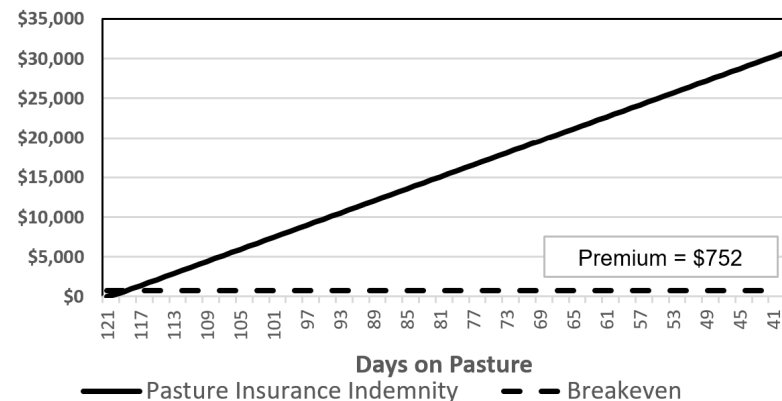
Pasture Days Insurance

Pasture Insurance Indemnity (based on 146 Head and 800 Acres @ 134 days historic grazing period)

Indemnity = \$7,448 or \$51/head



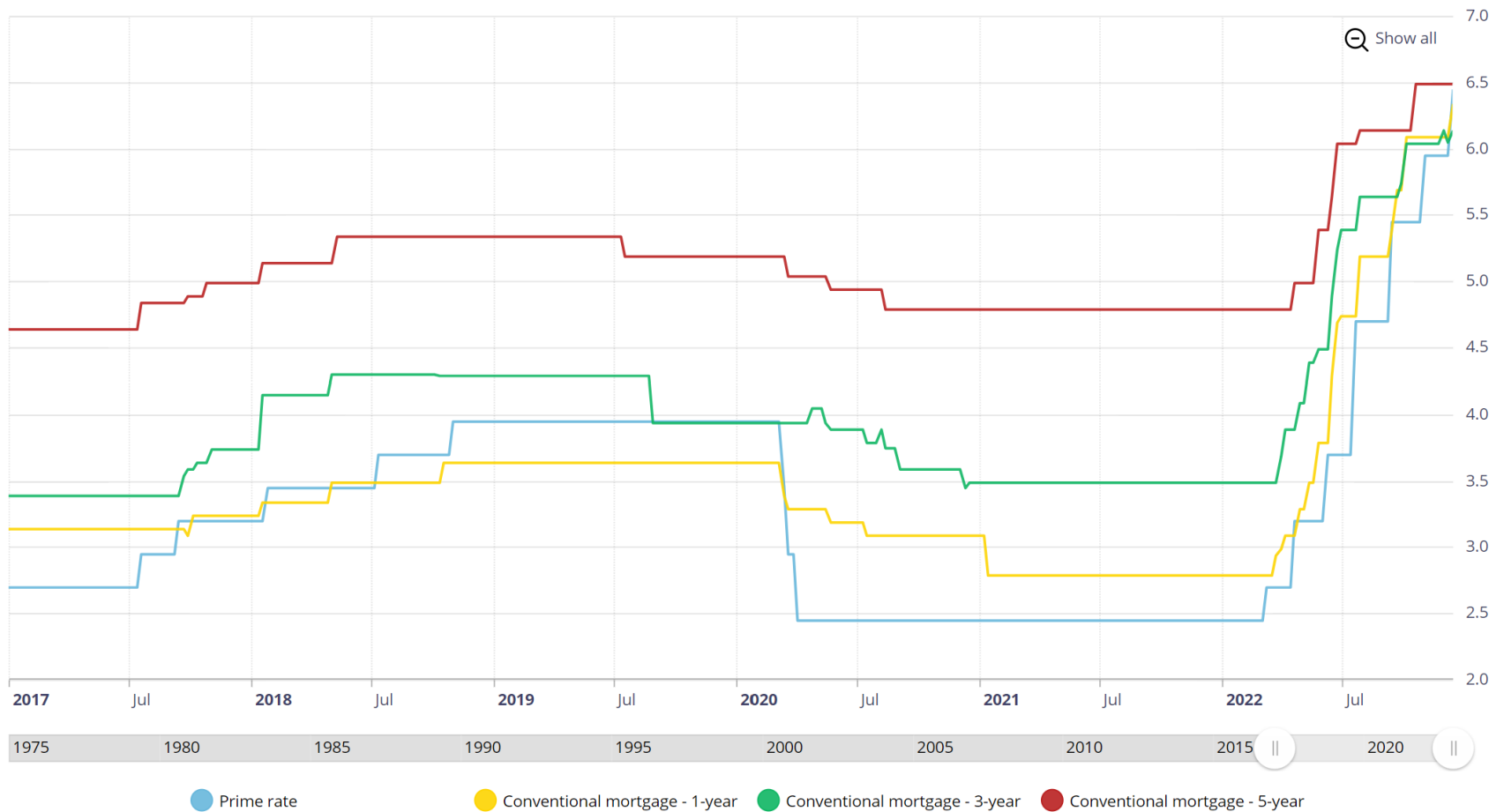
Indemnity Based on Days on Pasture



Interest rates

Interest rates posted for selected products by the major chartered banks

Weekly Wednesday, rates in percentage



LoanPlan - Loan Calculator

Printed: 2022-12-15

*** Enter changes to BLUE numbers only ***

Basic Loan Information

Amount	\$250,000	Annual Interest Rate	8.000%
Start Date of Loan	01-Jan-23	Length of Loan, Years	1
		Payments Per Year	annual

Payment Information

Calculated Payment	\$270,000.00	Total Payments	1
Entered Payment	\$0.00		

Summary Information

Total Paid	\$270,000.00	Accelerated Principle Paid	\$0.00
Interest Paid	\$20,000.00	Interest Saved	\$0.00
		Number of Payments Reduced	0

Pmnt #	Start of Period	Scheduled Balance	Actual Balance	Payment	Interest	Principal	Additional Principal Paid
1	01-Jan-23	\$250,000.00	\$250,000.00	\$270,000.00	\$20,000.00	\$250,000.00	\$0.00

Operating Loans

- Increasing interest rates
 - Take out cost by utilising Manitoba Livestock Cash Advance
 - Participate in Agristability or LPI

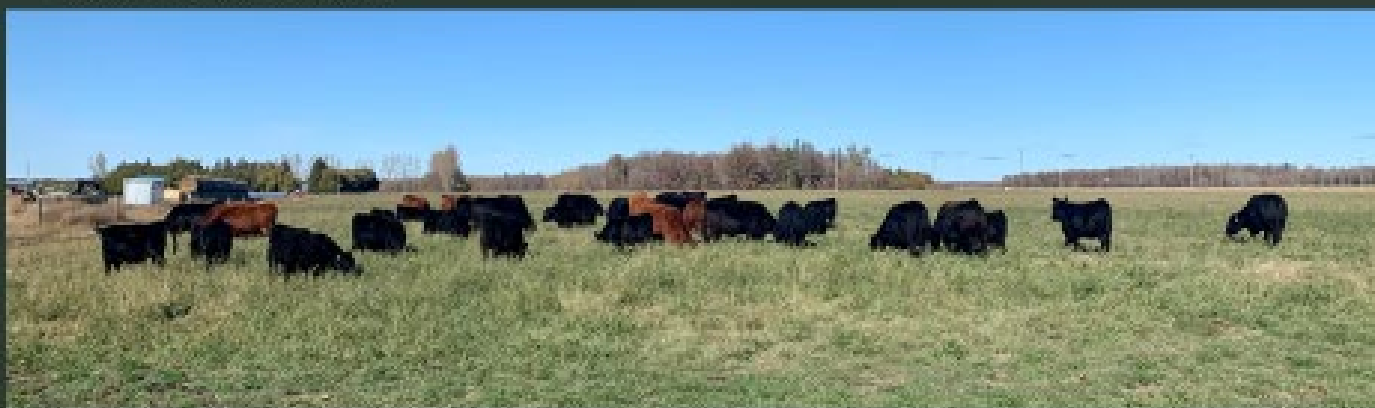
How much can you receive?

- Under the APP, you may be eligible to receive up to \$1,000,000, with:
- the federal government paying the interest on the first \$100,000 per program year. On June 23, 2022, the Minister of Agriculture and Agri-Food announced a temporary increase to the interest-free limit for advances under the Advance Payments Program (APP) to \$250,000.00 The change will make the purchase of important inputs such as fuel, fertilizer and seed more affordable for producers.
- preferential interest rates on advance amounts over the interest free limit (MLCA's Interest Bearing rate is Prime -0.15%)
- Your cash advance is calculated based on up to 50% of the anticipated market value of the eligible agricultural products that you will produce or have in storage. You cannot have more than \$1,000,000 in advances outstanding at any one time.

Contact Information

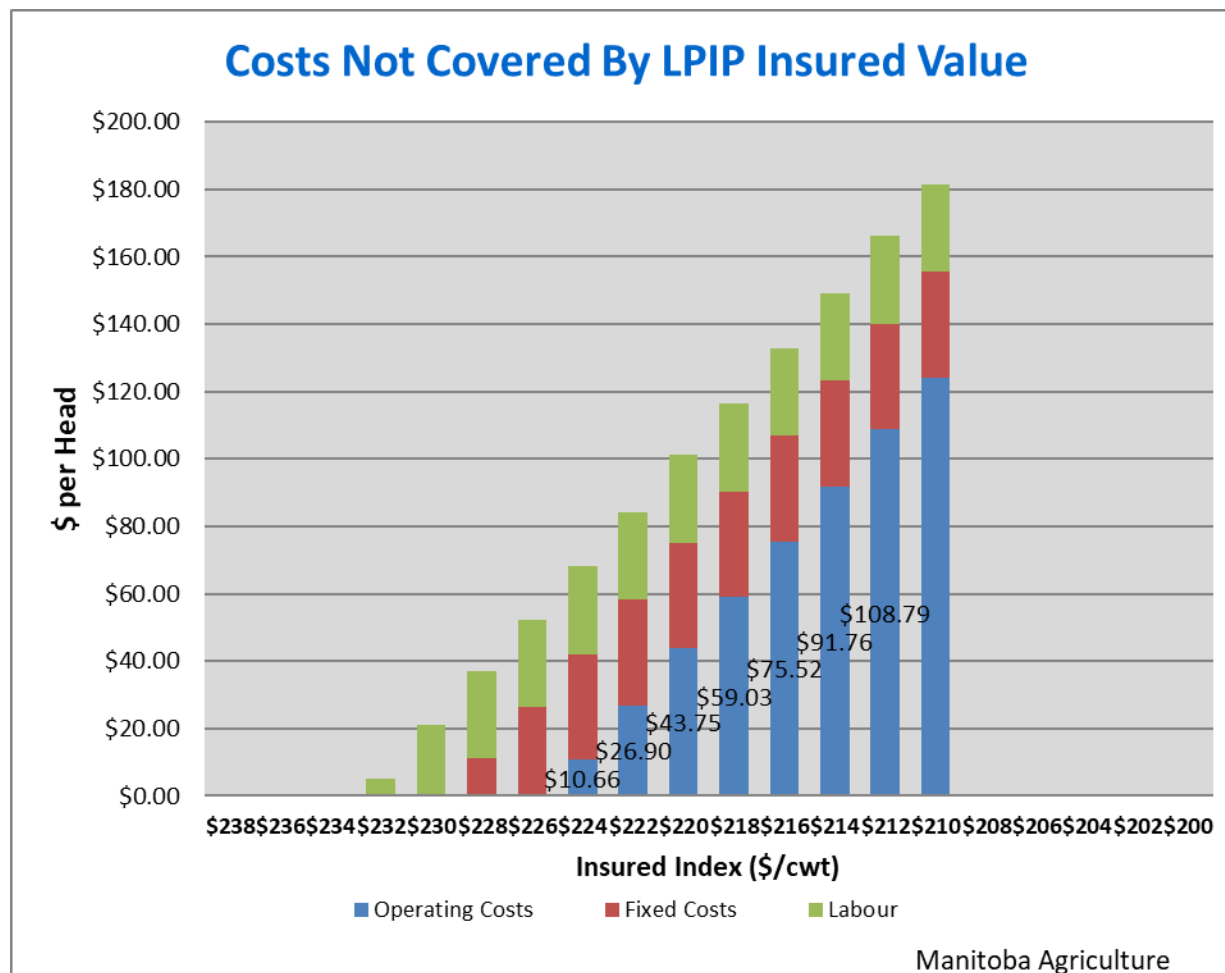
- For more information on the Advance Payments Program
- Call MLCA : 1-866-869-4008
- Email: mlca.cashadv@mymts.net
- Website: manitobalivestock.com

Photo Credit: Nicole Ridder



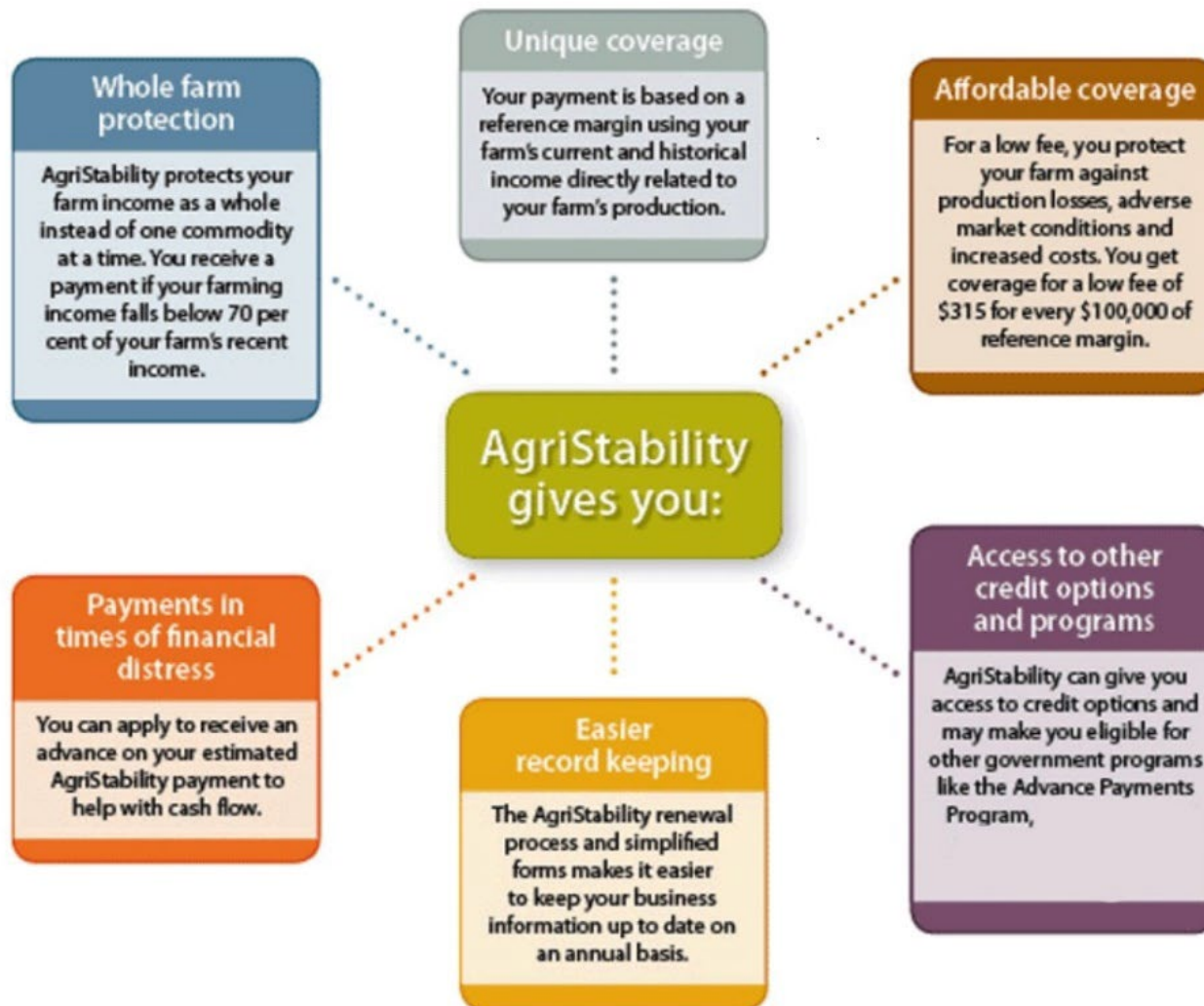
Livestock Commodity Price Protection

- Livestock price insurance



Agristability

- AgriStability provides whole-farm coverage.
- AgriStability provides coverage for losses caused by rising input costs and declining commodity prices, in addition to production risks.
- AgriInsurance covers 100 per cent of loss below the guaranteed yield, whereas AgriStability pays 70 per cent of the decline greater than 30 per cent of reference margin.
- AgriInsurance payments are allowable income in AgriStability, helping maintain and stabilize a producer's reference margin. Because producers do not pay the full cost of AgriInsurance premiums, over time continuous participation in AgriInsurance tends to increase AgriStability reference margins.
- AgriInsurance claims are paid after harvest, whereas AgriStability claims are paid after the end of the fiscal year.
- Both AgriInsurance and AgriStability can be used as security for cash advances under the Advance Payment Program.
- AgriInsurance provides coverage against prevented planting due to excess moisture, reseeding benefit, forage establishment insurance, forage restoration benefit, and forage and pasture insurance.
- **2022 Extended Signup Deadline June 30, 2022**
- **Agristability quick calculator**
- <https://ase-eas.agr.gc.ca/ASE-EAS/quickEstimator/form/en>



Summary

- Take out the risk with risk management programs
- Agri Insurance (forage and pasture)
- Livestock Price Insurance
- Agristability (whole farm)
- Manitoba livestock cash advance (operating interest)

Other tools to help manage risk

- Livestock price insurance calculator
- Forage/ silage agri insurance analyser in forage cost of production
- Pasture days insurance calculator
- Feed purchase decision calculator
- Forage moisture conversion calculator
- Agristability Quick Calculator
- <https://www.gov.mb.ca/agriculture/farm-management/production-economics/cost-of-production.html>



Online Calculators

Machinery

- Farm Machinery Custom and Rental Guide

Land, Fence & Buildings

- RentPlan Cropland Rental Rate Calculator
- Pasture Rental Rate Calculator
- FencePlan Cost Calculator
- Grain Bin and Farm Building Rental Cost Planner

Forage

- FeedPlan Feed Ingredient Cost Calculator
- Pasture Rental Rate Calculator
- Standing Hay Cost Calculator
- Standing Corn Cost Calculator
- Standing Greenfeed Cost Calculator
- Straw Cost Calculator
- Forage Price Moisture Conversion Calculator
- Forage Yield Moisture Conversion Calculator

Crops

- RentPlan Cropland Rental Rate Calculator
- Seeding Rate and Cost Calculator
- FertPlan Fertilizer Cost And Requirement Calculator
- Crop Reseeding Decision Tool
- Crop Disease Break Even Calculator
- Sclerotinia Treatment Decision Calculator (Canola)
- Sclerotinia Treatment Decision Calculator (Sunflowers)
- Grain Drying Cost Calculator
- Straw Cost Calculator

Livestock

- Beef Cow Overwinter Cost Calculator
- FeedPlan Feed Ingredient Cost Calculator
- LPI Decision Calculator (Calf)
- LPI Decision Calculator (Feeder)
- Calf Creep Feed Calculator

Questions?

Contact me:

Ben Hamm

Farm Enterprise Management Specialist

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