3-Cut System, 4-Year Rotation

Alfalfa Snout Beetle is costing you up to $381 per acre.

YEAR 1*
Establishment
Loss = $136/A

YEAR 2 (1ST full production year)

Mowing and Raking 3 times	$75
11.4 tons (35% DM) at $8/ton	$91
Land Cost, Overhead	$150
Nutrient Removal (0-40-240)	$135
Total 2nd Year Cost	$451/A
Profit: 4 tons DM at $170/ton	$680/A
2nd Year Cost	-$451
Total Profit Year 2	**= $229/A**

NO STAND LOSS

YEAR 3 (2nd full production year)

Mowing and Raking 3 times	$75
10 tons (35% DM) at $8/ton	$80
Land Cost, Overhead	$150
Nutrient Removal (0-35-210)	$118
Total 3rd Year Cost	$423/A
Profit: 3.5 tons DM at $170/ton	$595/A
3rd Year Cost	-$423
Total Profit Year 3	**=$172/A**

YEAR 4 (3rd full production year)

Mowing and Raking 3 times	$75
8.6 tons (35% DM) at $8/ton	$69
Land Cost, Overhead	$150
Nutrient Removal (0-30-180)	$100
Total 4th Year Cost	$394/A
Profit: 3 tons DM at $170/ton	$510/A
4th Year Cost	-$394
Total Profit Year 4	**=$116/A**

TOTAL FROM YEARS 1,2,3,4

Year 1 (Establishment)	LOSS = $136/A
Year 2	PROFIT = $229/A
Year 3	PROFIT = $172/A
Year 4	PROFIT = $116/A
Total Profit	**= $381/A**

YEAR 2 (1ST full production year)

Mowing and Raking 3 times	$75
11.4 tons (35% DM) at $8/ton	$91
Land Cost, Overhead	$150
Nutrient Removal (0-40-240)	$135
Total 2nd Year Cost	$451/A
Profit: 4 tons DM at $170/ton	$680/A
2nd Year Cost	-$451
Total Profit Year 2	**= $229/A**

50% STAND LOSS

YEAR 3 (2nd full production year)

Mowing and Raking 3 times	$75
5.7 tons (35% DM) at $8/ton	$46
Land Cost, Overhead	$150
Nutrient Removal (0-20-120)	$67
Total 3rd Year Cost	$338/A
Profit: 2 tons DM at $170/ton	$340/A
3rd Year Cost	-$338
Total Profit Year 3	**=$2/A**

YEAR 4 (3rd full production year)

Total Loss Year 4 = $116/A

If 50% loss of stand occurs following the second full production year, ASB damage will result in a loss of $21/A across the 4-year life of the stand.

TOTAL FROM YEARS 1,2,3,4

Year 1 (Establishment)	LOSS = $136/A
Year 2	PROFIT = $229/A
Year 3	PROFIT = $2/A
Year 4	LOSS = $116/A
Total Loss	**= $21/A**

YEAR 2 (1ST full production year)

Mowing and Raking 3 times	$75
11.4 tons (35% DM) at $8/ton	$91
Land Cost, Overhead	$150
Nutrient Removal (0-40-240)	$135
Total 2nd Year Cost	$451/A
Profit: 4 tons DM at $170/ton	$680/A
2nd Year Cost	-$451
Total Profit Year 2	**= $229/A**

100% STAND LOSS

YEAR 3 (2nd full production year)

Total Loss Year 3 = $172/A

If 100% loss of stand occurs following the first full production year, ASB damage will result in a loss of $79/A across the 3-year life of the stand.

YEAR 4 (3rd full production year)

Total Loss Year 4 = $116/A

If 100% loss of stand occurs following the second full production year, ASB damage will result in a loss of $195/A across the 4-year life of the stand.

TOTAL FROM YEARS 1,2,3,4

Year 1 (Establishment)	LOSS = $136/A
Year 2	PROFIT = $229/A
Year 3	LOSS = $172/A
Year 4	LOSS = $116/A
Total Loss	**= $195/A**

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* Total 1st year cost $510/A (Land Cost/Overhead $150, Tillage/Planting $70, Seed $80, Fertilizer/Manure $80, Herbicide $30, Mowing/Raking $50, Chop/Haul/Ensile 6.3 tons at $8/ton $50). Profit estimated at $374/acre (2.2 tons DM x $170/ton). Source: 2012 Pennsylvania Custom Rates Table

We thank Everett D. Thomas, Michael E. Hunter, and Thomas F. Kilcer for contributions to this effort.

4-Cut System, 3-Year Rotation

Alfalfa Snout Beetle is costing you up to $487 per acre.

YEAR 1*
Establishment
Loss = $136/A

YEAR 2 (1ST full production year)

Mowing and Raking 4 times	$100
12.9 tons (35% DM) at $8/ton	$103
Land Cost, Overhead	$150
Nutrient Removal (0-45-270)	$152
Total 2nd Year Cost	$505/A
Profit: 4.5 tons DM at $170/ton	$765/A
2nd Year Cost	-$505
Total Profit Year 2 =	**$260/A**

NO STAND LOSS

YEAR 3 (2nd full production year)

Mowing and Raking 4 times	$100
10 tons (35% DM) at $8/ton	$80
Land Cost, Overhead	$150
Nutrient Removal (0-40-240)	$135
Total 3rd Year Cost	$465/A
Profit: 4 tons DM at $170/ton	$680/A
3rd Year Cost	-$465
Total Profit Year 3	**=$215/A**

IF STAND PERSISTS - YEAR 4

Mowing and Raking 4 times	$100
10 tons (35% DM) at $8/ton	$80
Land Cost, Overhead	$150
Nutrient Removal (0-35-210)	$117
Total 4th Year Cost	$447/A
Profit: 3.5 tons DM at $170/ton	$595/A
4th Year Cost	-$447
Total Profit Year 4	**=$148/A**

TOTAL FROM YEARS 1,2,3,4

Year 1 (Establishment)	LOSS = $136/A
Year 2	PROFIT = $260/A
Year 3	PROFIT = $215/A
Year 4	PROFIT = $148/A
Total Profit - 3 years	**= $339/A**
Total Profit - 4 years	**= $487/A**

YEAR 2 (1ST full production year)

Mowing and Raking 4 times	$100
12.9 tons (35% DM) at $8/ton	$103
Land Cost, Overhead	$150
Nutrient Removal (0-45-270)	$152
Total 2nd Year Cost	$505/A
Profit: 4.5 tons DM at $170/ton	$765/A
2nd Year Cost	-$505
Total Profit Year 2 =	**$260/A**

50% STAND LOSS

YEAR 3 (2nd full production year)

Mowing and Raking 4 times	$100
6.4 tons (35% DM) at $8/ton	$51
Land Cost, Overhead	$150
Nutrient Removal (0-23-135)	$76
Total 3rd Year Cost	$377/A
Profit: 2.25 tons DM at $170/ton	$383/A
3rd Year Cost	-$377
Total Profit Year 3	**=$6/A**

IF STAND PERSISTS – YEAR 4

Total Loss Year 4 = $148/A

If 50% loss of stand occurs following the second full production year, ASB damage will result in a loss of $18/A across the 4-year life of the stand.

TOTAL FROM YEARS 1,2,3,4

Year 1 (Establishment)	LOSS = $136/A
Year 2	PROFIT = $260/A
Year 3	PROFIT = $6/A
Year 4	LOSS = $148/A
Total Profit - 3 years	**= $130/A**
Total Loss - 4 years	**= $18/A**

YEAR 2 (1ST full production year)

Mowing and Raking 4 times	$100
12.9 tons (35% DM) at $8/ton	$103
Land Cost, Overhead	$150
Nutrient Removal (0-45-270)	$152
Total 2nd Year Cost	$505/A
Profit: 4.5 tons DM at $170/ton	$765/A
2nd Year Cost	-$505
Total Profit Year 2 =	**$260/A**

100% STAND LOSS

YEAR 3 (2nd full production year)

Total Loss Year 3 = $215/A

If 100% loss of stand occurs following the first full production year, ASB damage will result in a loss of $91/A across the 3-year life of the stand.

IF STAND PERSISTS – YEAR 4

Total Loss Year 4 = $148/A

If 100% loss of stand occurs following the second full production year, ASB damage will result in a loss of $239/A across the 4-year life of the stand.

TOTAL FROM YEARS 1,2,3,4

Year 1 (Establishment)	LOSS = $136/A
Year 2	PROFIT = $260/A
Year 3	LOSS = $215/A
Year 4	LOSS = $148/A
Total Loss - 3 years	**= $91/A**
Total Loss - 4 years	**= $239/A**

* Total 1st year cost $510/A (Land Cost/Overhead $150, Tillage/Planting $70, Seed $80, Fertilizer/Manure $80, Herbicide $30, Mowing/Raking $50, Chop/Haul/Ensile 6.3 tons at $8/ton $50). Profit estimated at $374/acre (2.2 tons DM x $170/ton). Source: 2012 Pennsylvania Custom Rates Table

We thank Everett D. Thomas, Michael E. Hunter, and Thomas F. Kilcer for contributions to this effort.