Master Hay Grower
Risk Management for Hay Growers

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RightRisk™ RMA USDA

Sources of Risk in Agriculture – *Ag Risk 5*

1. Marketing/Price Risk
2. Production Risk
3. Institutional/Legal Risk
4. Human Risk
5. Financial Risk

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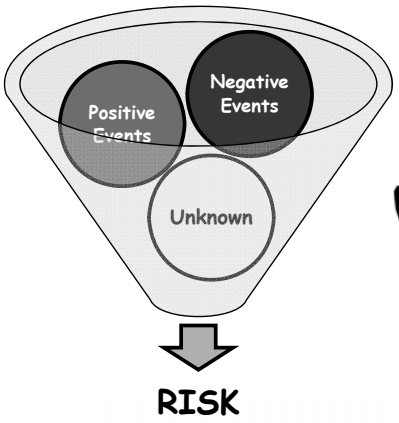
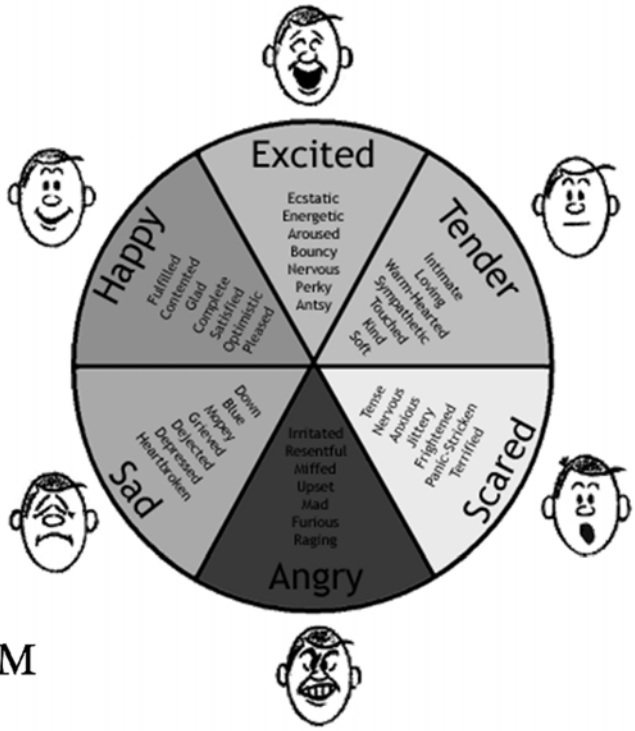
What is RISK?

- **Cost of Loss**
  - *Income*
  - *Resources*
  - *Productive capacity, etc.*
- **Cost of Uncertainty**
  - *Worry, doubt, fear, misallocation of resources, etc.*
  - *With potential for gain or loss comes moral or ethical implications*

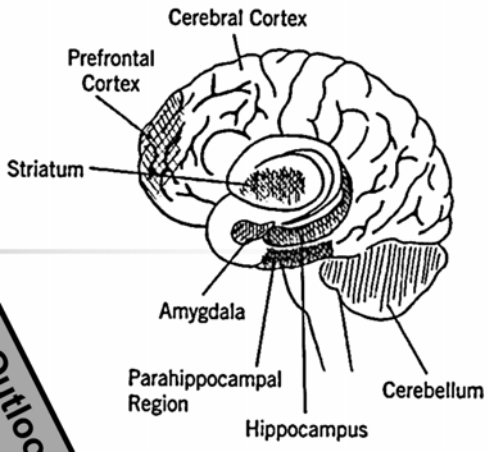


The Human Dimension of Risk Management

EMOTION



Risk Tolerance: Emotional Style*



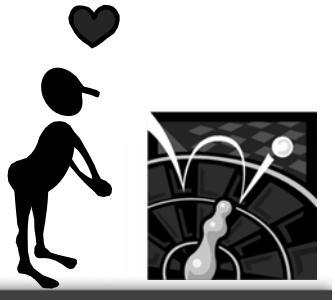
* The Emotional Life of Your Brain, Davidson and Begley, 2012.

Types of Risk Preference

Risk Averse

Risk Neutral

Risk Loving



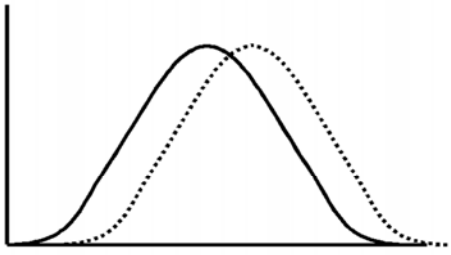
Strategies for Managing Risk

1. **Avoid it**
2. **Reduce it**
   a) Reduce the probability it will happen
   b) Reduce the impact if it does happen
3. **Transfer it outside the business**
   a) Insurance
   b) Contracting
4. **Increase capacity to bare**
   a) Increase reserves
   b) Maintain flexibility
5. **Accept it**

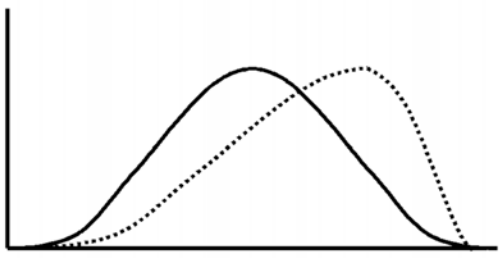
Strategy Impacts

Panel 1: Same Mean, Less Dispersion

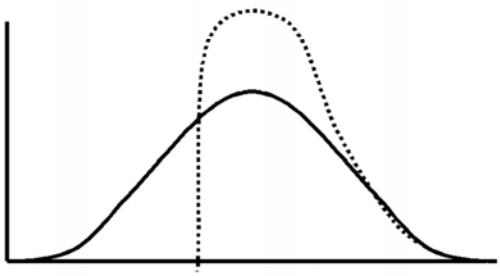
Panel 2: Same Dispersion, Higher Mean



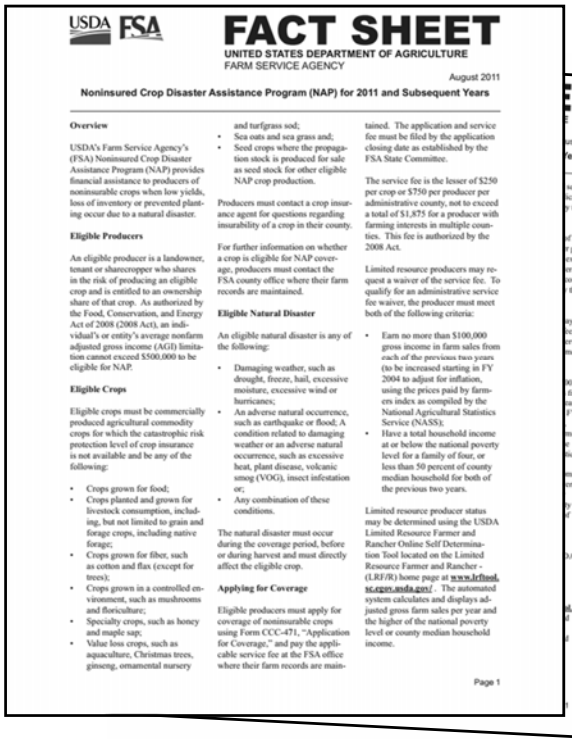
Panel 3: Skewing the distribution



Panel 4: Truncating the Distribution



Farm Service Agency:
Noninsured Crop Disaster Assistance Program (NAP)



USDA FSA

FACT SHEET

UNITED STATES DEPARTMENT OF AGRICULTURE
FARM SERVICE AGENCY

August 2011

Noninsured Crop Disaster Assistance Program (NAP) for 2011 and Subsequent Years

Overview

USDA's Farm Service Agency's (FSA) Noninsured Crop Disaster Assistance Program (NAP) provides financial assistance to producers of noninsurable crops when low yields, loss of inventory or prevented planting occur due to a natural disaster.

Eligible Producers

An eligible producer is a landowner, tenant or sharecropper who shares in the risk of producing an eligible crop and is entitled to an ownership share of that crop. As authorized by the Food, Conservation, and Energy Act of 2008 (2008 Act), an individual's or entity's average nonfarm adjusted gross income (AGI) limitation cannot exceed $500,000 to be eligible for NAP.

Eligible Crops

Eligible crops must be commercially produced agricultural commodity crops for which the catastrophic risk protection level of crop insurance is not available and be any of the following:

- Crops grown for food;
- Crops planted and grown for livestock consumption, including, but not limited to grain and forage crops, including native forage;
- Crops grown for fiber, such as cotton and flax (except for trees);
- Crops grown in a controlled environment, such as mushrooms and floriculture;
- Specialty crops, such as honey and maple sap;
- Value loss crops, such as aquaculture, Christmas trees, ginseng, ornamental nursery and turfgrass sod;
- Sea oats and sea grass and;
- Seed crops where the propagation stock is produced for sale as seed stock for other eligible NAP crop production.

Producers must contact a crop insurance agent for questions regarding insurability of a crop in their county.

For further information on whether a crop is eligible for NAP coverage, producers must contact the FSA county office where their farm records are maintained.

Eligible Natural Disaster

An eligible natural disaster is any of the following:

- Damaging weather, such as drought, freeze, hail, excessive moisture, excessive wind or hurricanes;
- An adverse natural occurrence, such as earthquake or flood; A condition related to damaging weather or an adverse natural occurrence, such as excessive heat, plant disease, volcanic smog (VOG), insect infestation or;
- Any combination of these conditions.

The natural disaster must occur during the coverage period, before or during harvest and must directly affect the eligible crop.

Applying for Coverage

Eligible producers must apply for coverage of noninsurable crops using Form CCC-471, "Application for Coverage," and pay the applicable service fee at the FSA office where their farm records are maintained. The application and service fee must be filed by the application closing date as established by the FSA State Committee.

The service fee is the lesser of $250 per crop or $750 per producer per administrative county, not to exceed a total of $1,875 for a producer with farming interests in multiple counties. This fee is authorized by the 2008 Act.

Limited resource producers may request a waiver of the service fee. To qualify for an administrative service fee waiver, the producer must meet both of the following criteria:

- Earn no more than $100,000 gross income in farm sales from each of the previous two years (to be increased starting in FY 2004 to adjust for inflation, using the prices paid by farmers index as compiled by the National Agricultural Statistics Service (NASS);
- Have a total household income at or below the national poverty level for a family of four, or less than 50 percent of county median household for both of the previous two years.

Limited resource producer status may be determined using the USDA Limited Resource Farmer and Rancher Online Self Determination Tool located on the Limited Resource Farmer and Rancher - (LRF/R) home page at www.lrftool.sc.egov.usda.gov/ . The automated system calculates and displays adjusted gross farm sales per year and the higher of the national poverty level or county median household income.

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Catastrophic Loss -
NAP is catastrophic level (50 percent coverage) insurance for crops not insured by Federal Crop Insurance

December 1 - Final Day to sign up for NAP to cover grass hay or grass for grazing.

April 1 - Final Day to sign up for NAP to cover spring-planted crops.

Premium-
$250 per crop, $750 per county, and capped at $1,875 per producer.

Current Federal Insurance Options

2012 Wyoming Crop Insurance Profile

Insurance Plans Available in Wyoming

Insurable Crops	Insured Acres	Total Acres	Percent Insured
Alfalfa Seed	6,059	7,500	81%
Barley	47,624	75,000	63%
Corn	66,697	105,000	64%
Dry Beans	37,436	45,000	83%
Forage Production	122,212	875,000	14%
Forage Seeding	2,704	40,000	7%
Millet	3,998	15,000	27%
Oats	5,263	30,000	18%
Potatoes	40	535	7%
Sugar Beets	26,407	31,800	83%
Sunflowers	8,407	9,700	87%
Wheat	123,645	149,200	83%
Totals:	450,492	1,383,735	33%
Additional Information			
Prevented Planting Acres	1,748		

Dollar Liability Program	Total Dollar Liability
Cattle (LGM)	0
Dairy Cattle (LGM)	0
Fed Cattle (LRP)	0
Feeder Cattle (LRP)	3,481,959
Lamb (LRP)	26,502,386
Swine (LRP, LGM)	0
Adjusted Gross Revenue – LITE (AGR-LITE)	764,035
Apiculture (Vegetation Index)	0
Nursery (Dollar)	295,119
Pasture, Rangeland, Forage (Vegetation Index)	4,896,190
Total	35,939,689

Crop Pilot Programs

Program	County Availability
Alfalfa Seed (APH)	Big Horn, Park Counties
Apiculture (Vegetation Index)	All Counties
Pasture, Rangeland & Forage (Vegetation Index)	All Counties

Billings Regional Office
Contact: Doug Hagel, Director
Address: 3490 Gabel Road
Suite 100
Billings, MT 59102
Phone: (406) 657-6447
Fax: (406) 657-6573
E-Mail: rsomt@rma.usda.gov

Northern Regional Compliance Office
Contact: Scott Tincher, Director
Address: Suite 200
3400 Federal Drive
Egan, MN 55122
Phone: (612) 725-3730
Fax: (612) 725-3735
E-Mail: cfomn@rma.usda.gov

LGM: Livestock Gross Margin
LRP: Livestock Risk Protection

Data as of January 8th, 2013

Year	Policies Earning Premium	Net Acres Insured	Liability	Gross Premium	Losses	Loss Ratio
1998	2,409	316,337	45,408,251	2,559,039	1,978,874	0.77
1999	2,585	368,293	52,260,660	3,052,725	1,887,216	0.62
2000	2,518	390,286	55,699,761	3,283,065	4,158,921	1.27
2001	2,379	357,930	44,984,749	3,375,808	6,829,348	2.02
2002	2,799	463,016	51,105,089	4,370,774	14,569,144	3.33
2003	2,765	490,461	62,361,648	6,020,804	6,301,359	1.05
2004	2,992	521,765	66,245,558	6,960,893	14,925,461	2.14
2005	3,969	7,490,374	93,066,296	10,543,486	9,524,521	0.90
2006	3,727	7,313,670	89,880,586	10,436,976	21,205,564	2.03
2007	3,633	8,022,532	103,122,528	13,045,530	19,733,159	1.51
2008	3,574	8,021,641	136,924,517	18,460,889	11,524,291	0.62
2009	3,066	4,890,634	127,945,867	17,727,225	13,084,874	0.74
2010	2,783	2,375,239	105,994,714	13,750,556	6,858,437	0.50
2011	2,655	1,557,491	128,770,165	17,168,313	7,830,105	0.46
2012	2,557	1,220,363	140,956,529	16,989,883	17,590,712	1.04

Summary of Policies Sold, by crop

Federal Crop Insurance Corporation
Crop Year Statistics for 2013
As of: 1/20/2014
Nationwide Summary - By State/Crop

Crop	Ins Plan	Pol Sold	Pol Earn Prem	Pol Indem	Units Earn Prem	Units Indem	Net Acres	Liabilities	Total Premium	Subsidy	Cost Share	State Sbsdy	Prem Dscnt	Indemnity	Loss Ratio
WYOMING															
ADJUSTED GROSS REVENUE-LITE	AGRLT	2	2	0	2	0	0	834,469	29,928	16,460	0	0	0	0	.00
ALFALFA SEED	APH	63	41	2	122	3	5,863	5,524,512	836,040	485,545	0	0	0	124,826	.15
BARLEY	RP	118	71	43	203	93	9,575	3,450,344	325,764	167,625	0	0	0	637,323	1.96
	RPHPE	2	1	1	1	1	30	8,379	1,086	597	0	0	0	2,991	2.75
	YP	634	217	65	574	127	39,576	12,573,839	782,741	418,526	0	0	0	761,797	.97
BARLEY Total		754	289	109	778	221	49,181	16,032,562	1,109,591	586,748	0	0	0	1,402,111	1.26
CORN	RP	512	295	107	668	186	42,823	22,114,295	3,008,813	1,755,832	0	0	0	2,816,266	.94
	RPHPE	5	5	2	8	2	504	195,221	24,490	14,181	0	0	0	27,081	1.11
	YP	307	155	22	331	30	20,700	10,278,380	938,503	564,351	0	0	0	386,527	.41
CORN Total		824	455	131	1,007	218	64,027	32,587,896	3,971,806	2,334,364	0	0	0	3,229,874	.81
DRY BEANS	APH	731	282	73	644	108	28,871	17,323,674	1,865,184	1,050,325	0	0	0	1,254,740	.67
DRY PEAS	APH	4	3	1	7	3	403	49,649	10,501	6,194	0	0	0	10,807	1.03
FORAGE PRODUCTION	APH	451	386	50	814	78	122,156	12,479,510	2,764,839	1,941,013	0	0	0	586,166	.21
FORAGE SEEDING	DOL	169	33	3	61	8	4,310	661,473	127,482	76,547	0	0	0	147,750	1.16
MILLET	APH	234	21	3	45	7	3,017	292,705	148,440	89,404	0	0	0	31,110	.21
NURSERY (FG&C)	DOL	1	1	0	15	0	0	77,869	1,799	990	0	0	0	0	.00
OATS	APH	527	43	10	59	12	4,299	465,549	73,900	47,653	0	0	0	46,168	.62
PASTURE,RANGELAND,FORAGE	VEGAT	224	199	177	511	376	1,349,958	10,457,387	1,754,261	914,430	0	0	0	3,772,018	2.15
POTATOES	APH	25	1	0	1	0	126	283,784	32,614	17,938	0	0	0	0	.00
SOYBEANS	YP	1	0	0	0	0	0	0	0	0	0	0	0	0	.00
SUGAR BEETS	APH	528	184	25	470	37	24,262	22,725,397	1,562,342	845,899	0	0	0	603,656	.39
SUNFLOWERS	RP	104	23	8	52	21	5,194	808,009	262,106	173,592	0	0	0	219,335	.84
	RPHPE	4	1	1	2	2	446	51,542	16,289	9,611	0	0	0	8,900	.55
	YP	196	20	3	50	3	3,343	822,704	168,641	95,704	0	0	0	23,215	.14
SUNFLOWERS Total		304	44	12	104	26	8,983	1,682,255	447,036	278,907	0	0	0	251,450	.56
WHEAT	RP	542	335	281	1,171	894	100,857	18,848,625	3,174,243	1,823,704	0	0	0	7,241,248	2.28
	RPHPE	1	0	0	0	0	0	0	0	0	0	0	0	0	.00
	YP	400	204	134	484	324	31,266	5,078,608	626,580	365,455	0	0	0	1,974,881	3.15
WHEAT Total		943	539	415	1,655	1,218	132,123	23,927,233	3,800,823	2,189,159	0	0	0	9,216,129	2.42
WYOMING Total		5,785	2,523	1,011	6,295	2,315	1,797,579	145,405,924	18,536,586	10,881,576	0	0	0	20,676,805	1.12
Grand Total		5,785	2,523	1,011	6,295	2,315	1,797,579	145,405,924	18,536,586	10,881,576	0	0	0	20,676,805	1.12

Research on:
Alfalfa Crop Insurance Policy

Forage Seeding

USDA RMA

United States Department of Agriculture
Risk Management Agency

January 2013

2013 COMMODITY INSURANCE FACT SHEET

Forage Seeding

Montana, North Dakota, South Dakota, Wyoming

Crop Insured

Forage seeding is a dollar plan of insurance that offers the producer the opportunity to select one of several dollar amounts of insurance per acre.

The crop insured will be perennial alfalfa, perennial grasses, or a mixture thereof in which you have a share that is **spring planted** during the current crop year to establish a normal stand intended for harvest. The policy **does not cover** any forage that is:

- grown with the intent to be grazed;
- grazed at any time during the insurance period;
- interplanted with another crop except barley, flax, oats or wheat. (Barley, oats, or wheat must be seeded at a rate of 16 pounds per acre or less and also must be cut for hay no later than milk stage. Flax must be seeded at a rate of 16 pounds per acre or less.)

Fall seeded forage may be insurable by written agreement if requested no later than August 31.

Insurable types include **alfalfa** and **alfalfa grass mixture** (determined by the number of live alfalfa plants per square foot equal to or exceeding the normal stand requirements shown below for the corresponding counties):

Normal Stand (Alfalfa plants per square foot)

Wyoming: Albany, Big Horn, Carbon, Fremont, Hot Springs, Natrona, Park, Sublette, Sweetwater, Teton, Uinta, Washakie counties

Irrigated Alfalfa	Irrigated Alf/Grass	Nonirr. Alfalfa	Nonirr. Alf/Grass
8.0	3.3		

Normal Stand (Alfalfa plants per square foot)

Montana: All counties

North Dakota: Divide, Williams, Mountrail, and all counties south and west of the Missouri River

South Dakota: All counties west of the Missouri River

Wyoming: Sheridan, Johnson, Campbell Crook, Weston, Converse, Niobrara, Platte, Goshen, Laramie, and Lincoln counties

Irrigated Alfalfa	Irrigated Alf/Grass	Nonirr. Alfalfa	Nonirr. Alf/Grass
8.0	3.3	6.4	2.7

Normal Stand (Alfalfa plants per square foot)

North Dakota: Pembina, Walsh, Grand Forks, Steele, Traill, Cass, Ransom, Sargent, Richland counties

South Dakota: Roberts, Grant, Hamlin, Deuel, Kingsbury, Brookings, Lake, Moody, McCook, Minnehaha, Hutchinson, Turner, Lincoln, Bon Homme, Yankton, Clay, Union counties

Irrigated Alfalfa	Irrigated Alf/Grass	Nonirr. Alfalfa	Nonirr. Alf/Grass
12.0	5.1	10.0	4.3

Normal Stand (Alfalfa plants per square foot)

North Dakota: All counties between and including Burke, Ward, McLean, Burleigh, Emmons, Cavalier, Ramsey, Nelson, Griggs, Barnes, LaMoure, Dickey counties

South Dakota: Marshall, Day, Codington, Clark, Beadle, Miner, Hanson, Douglas, Charles Mix and counties west to the Missouri River

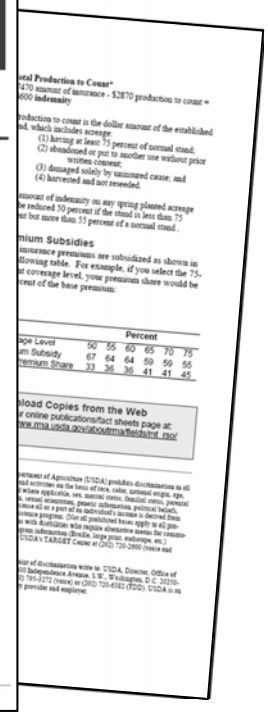
Irrigated Alfalfa	Irrigated Alf/Grass	Nonirr. Alfalfa	Nonirr. Alf/Grass
12.0	4.0	8.0	2.7

Insurance Period

Insurance **begins** when the forage is seeded and **ends** the earliest of:

(1) total destruction of the forage crop;
(2) final adjustment of a loss;
(3) abandonment of the forage crop;
(4) first harvest after August 5 (MT, WY) or August 15 (ND, SD) — you may harvest as often as practical on or before that date;
(5) date grazing commences on the forage crop; or
(6) May 21.

This fact sheet gives only a general overview of the crop insurance program and is not a complete policy. For further information and an evaluation of your risk management needs, contact a crop insurance agent.



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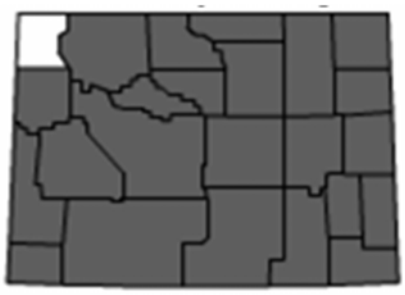
RMA Crop Production and Revenue Insurance Products

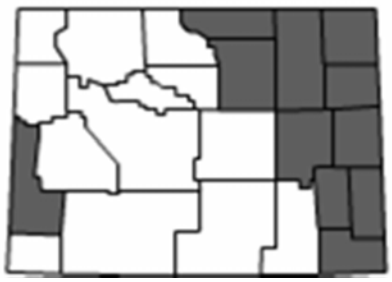
Forage Seeding Irrigated

Insured Counties for Irrigated Forage Seeding, MPCI (Dollar Value) Coverage



Forage Seeding Non-Irrigated

Insured Counties for Non-Irrigated Forage Seeding, MPCI (Dollar Value) Coverage



Insurability under MPCI for Forage Seeding:

- Insurable Crop
  - *Spring-seeded perennial alfalfa, perennial grasses, or a mixture*
- Insurable Types
  - *Alfalfa and alfalfa/grass mixtures as determined by the number of live alfalfa plants per square foot*
- Insurability Requirements
  - *Must be spring planted during the current year to establish a normal stand intended for harvest*
  - *Must not be grown with the intent to be grazed*
  - *New stand may not be grazed any time during the insurance period*
  - *The new stand may not be inter-planted with another crop except barley, flax, oats or wheat*

RMA Crop Production and Revenue Insurance Products

Insurability under MPCI for Forage Seeding

- Percent of Insurance
  - *67% to 100% of the reference dollar amount*
  - *CAT is available at a 55% of the referenced dollar amount*
- Coverage Levels
  - *The level of coverage is influenced by the selection of the amount of insurance but includes the 50, 55, 60, 65, 70 and 75% coverage levels*
  - *CAT is available at 50% coverage level*
- Reference Dollar Amounts
  - *Dollar amounts for <u>irrigated forage</u> seeding are announced annually……..…..**$349 for 2014***
  - *Dollar amounts for <u>non-irrigated forage</u> seeding are announced annually……..…..**$181 for 2014***

The Insurance Period

- The insurance period begins at the seeding date of the forage crop

- The insurance period ends at the earliest date of any of the following causes:
  - *Total destruction of the insured crop*
  - *First harvest after August 5 of the year of establishment*
  - *Final adjustment of a loss*
  - *Abandonment of the insured crop*

RMA Crop Production and Revenue Insurance Products

Forage Seeding Insurance

Normal stands of forage seeding, by type and practice

Alfalfa Plants Per Square Foot		
Type	**Irrigated**	**Nonirrigated**
Alfalfa	8.0	6.4
Alfalfa/Grass	3.3	2.7

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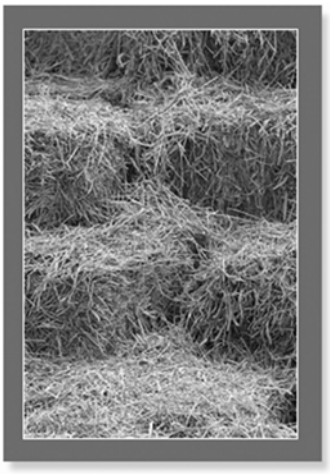
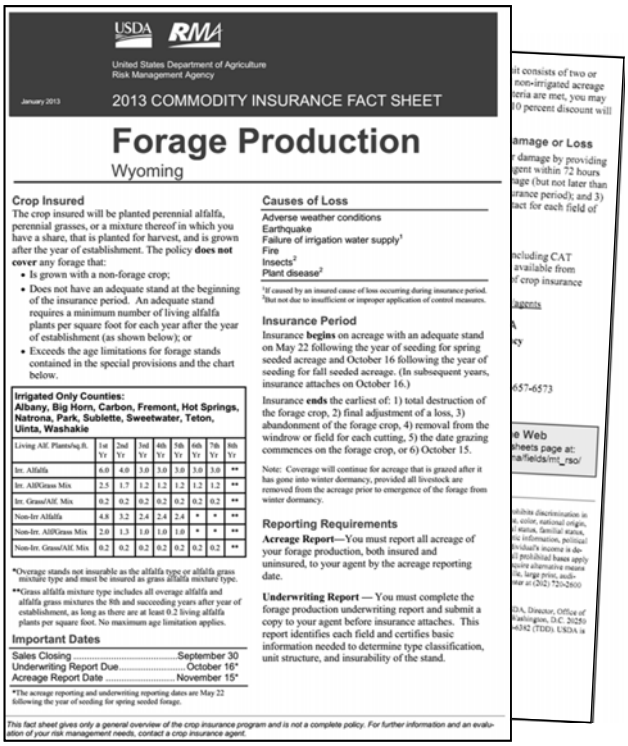
- Per acre Indemnity for Forage Seeding
- Indemnity = Total Dollar Coverage – Production to Count
- If the stand is between 55% and 75%, there is a 50% reduction in the per acre indemnity



Forage Production



USDA RMA

United States Department of Agriculture
Risk Management Agency

January 2013

2013 COMMODITY INSURANCE FACT SHEET

Forage Production

Wyoming

Crop Insured

The crop insured will be planted perennial alfalfa, perennial grasses, or a mixture thereof in which you have a share, that is planted for harvest, and is grown after the year of establishment. The policy **does not cover** any forage that:

- Is grown with a non-forage crop;
- Does not have an adequate stand at the beginning of the insurance period. An adequate stand requires a minimum number of living alfalfa plants per square foot for each year after the year of establishment (as shown below); or
- Exceeds the age limitations for forage stands contained in the special provisions and the chart below.

Irrigated Only Counties:
Albany, Big Horn, Carbon, Fremont, Hot Springs, Natrona, Park, Sublette, Sweetwater, Teton, Uinta, Washakie

Living Alf. Plants/sq. ft.	1st Yr	2nd Yr	3rd Yr	4th Yr	5th Yr	6th Yr	7th Yr	8th Yr
Irr. Alfalfa	6.0	4.0	3.0	3.0	3.0	3.0	3.0	**
Irr. Alf/Grass Mix.	2.5	1.7	1.2	1.2	1.2	1.2	1.2	**
Irr. Grass/Alf. Mix.	0.2	0.2	0.2	0.2	0.2	0.2	0.2	**
Non-Irr Alfalfa	4.8	3.2	2.4	2.4	2.4	*	*	**
Non-Irr. Alf/Grass Mix	2.0	1.3	1.0	1.0	1.0	*	*	**
Non-Irr. Grass/Alf. Mix	0.2	0.2	0.2	0.2	0.2	0.2	0.2	**

*Overage stands not insurable as the alfalfa type or alfalfa grass mixture type and must be insured as grass alfalfa mixture type.

**Grass alfalfa mixture type includes all overage alfalfa and alfalfa grass mixtures the 8th and succeeding years after year of establishment, as long as there are at least 0.2 living alfalfa plants per square foot. No maximum age limitation applies.

Important Dates

Sales Closing ..... September 30
Underwriting Report Due ..... October 16*
Acreage Report Date ..... November 15*

*The acreage reporting and underwriting reporting dates are May 22 following the year of seeding for spring seeded forage.

Causes of Loss

Adverse weather conditions
Earthquake
Failure of irrigation water supply[1]
Fire
Insects[2]
Plant disease[2]

[1]If caused by an insured cause of loss occurring during insurance period.
[2]But not due to insufficient or improper application of control measures.

Insurance Period

Insurance **begins** on acreage with an adequate stand on May 22 following the year of seeding for spring seeded acreage and October 16 following the year of seeding for fall seeded acreage. (In subsequent years, insurance attaches on October 16.)

Insurance **ends** the earliest of: 1) total destruction of the forage crop, 2) final adjustment of a loss, 3) abandonment of the forage crop, 4) removal from the windrow or field for each cutting, 5) the date grazing commences on the forage crop, or 6) October 15.

Note: Coverage will continue for acreage that is grazed after it has gone into winter dormancy, provided all livestock are removed from the acreage prior to emergence of the forage from winter dormancy.

Reporting Requirements

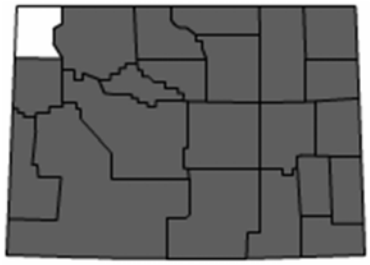
Acreage Report—You must report all acreage of your forage production, both insured and uninsured, to your agent by the acreage reporting date.

Underwriting Report — You must complete the forage production underwriting report and submit a copy to your agent before insurance attaches. This report identifies each field and certifies basic information needed to determine type classification, unit structure, and insurability of the stand.

This fact sheet gives only a general overview of the crop insurance program and is not a complete policy. For further information and an evaluation of your risk management needs, contact a crop insurance agent.

Alfalfa Hay Irrigated

Insured Counties for Irrigated Forage Production, MPCI Coverage*

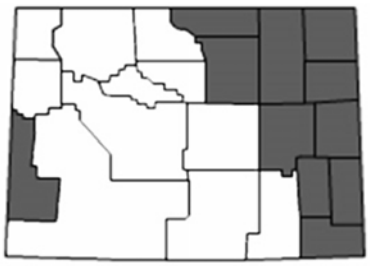


Lincoln, Sheridan, Johnson, Campbell, Crook, Weston, Converse, Niobrara, Platte, Goshen and Laramie counties have coverage for irrigated and non-irrigated production.

All other counties have coverage for <u>only</u> irrigated production

Alfalfa Hay Non-irrigated

Insured Counties for Non-irrigated Forage Production, MPCI Coverage*



Lincoln, Sheridan, Johnson, Campbell, Crook, Weston, Converse, Niobrara, Platte, Goshen and Laramie counties have coverage for irrigated and non-irrigated production.

All other counties have coverage for <u>only</u> irrigated production

RMA Crop Production and Revenue Insurance Products

MPCI-Forage Production Insurance

- Insurable Crop
  - *Forage planted for harvest consisting of planted perennial alfalfa, perennial grasses, or a mixture*
- Insurability Requirements
  - *The forage must not be grown with a non-forage crop*
  - *The forage is first insurable as forage for production in the year after establishment; and*
  - *The forage has an adequate stand of living alfalfa plants*

MPCI-Forage Production Insurance

- Insurable Types
  - *Alfalfa, Alfalfa/grass and Grass/alfalfa Mixtures*
- Insurable Practices
  - *Both irrigated and non-irrigated forage for harvest are insurable*
- Coverage Level
  - *50, 55, 60, 65, 70 and 75% of APH*
- Price Election
  - *55% to 100% of maximum price election*

RMA Crop Production and Revenue Insurance Products

MPCI-Forage Production Insurance

- Maximum price elections (Established Prices) are announced annually for Alfalfa, Alfalfa Grass Mixture, and Grass Alfalfa Mixture
- Irrigated production **….$210/Ton** for 2014
- Non-irrigated production **….$210/Ton** for 2014
- CAT is available at the 50% coverage level and 55% of the maximum price election
- Insured Period Beginning
  - *May 22nd following the year of seeding for spring-seeded acreage*
  - *October 16th following the year of seeding for fall-seeding acreage*
  - *In subsequent years – October 16th*

MPCI-Forage Production Insurance

- Insured Period ends at the earliest date when one of the following occurs:
  - *Total destruction of the forage crop*
  - *Final adjustment for a loss*
  - *Abandonment of the crop*
  - *Removal from the windrow for each cutting*
  - *Date grazing commences*

- Note: Coverage will continue for acreage that is grazed after it has gone into winter dormancy provided all livestock are removed from the acreage prior to emergence of the forage from winter dormancy.
  - *October 15th*

RMA Crop Production and Revenue Insurance Products

MPCI-Forage Production Insurance Forage Types Definitions

- Three types of forage:
  - *Alfalfa*
  - *Alfalfa/grass mixtures*
  - *Grass/alfalfa mixtures*

- Mixtures are distinguished by the number of living alfalfa plants per square foot

- Insurable after the year-of-stand establishment

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MPCI-Forage Production Insurance Forage Types Definitions

- Irrigated alfalfa and alfalfa/grass are “overaged” after the 7th year
- Non-irrigated alfalfa and alfalfa/grass are overaged after the 5th year and must be insured as grass/alfalfa
- Grass/alfalfa includes all overage alfalfa and alfalfa/grass
  - *At least 0.2 living alfalfa plants per square foot*
  - *No age limitation*

RMA Crop Production and Revenue Insurance Products

Minimum Number of Living Alfalfa Plants per Square Foot, By Type

Forage/Practice	1st Year	2nd Year	3rd Year	4th Year	5th Year	6th Year	7th Year	8th Year
Alfalfa Irrigated	6.0	4.0	3.0	3.0	3.0	3.0	3.0	**
Alfalfa/Grass Irrigated	2.5	1.7	1.2	1.2	1.2	1.2	1.2	**
Grass/Alfalfa Irrigated	0.2	0.2	0.2	0.2	0.2	0.2	0.2	**
Alfalfa Non-Irrigated	4.8	3.2	2.4	2.4	2.4	*	*	**
Alfalfa/Grass Non-Irrigated	2.0	1.3	1.0	1.0	1.0	*	*	**
Grass/Alfalfa Non-Irrigated	0.2	0.2	0.2	0.2	0.2	0.2	0.2	**

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APH Yields for Forage Production

- Yields, acreage, and production records must be written and verifiable
- For forage production that is sold, forage sales records must be:
  - *Generated in the same time period with harvesting*
  - *Substantiated by marketing records of a buyer such as settlement sheets, certified weight tage, or load receipts*
  - *Include the buyer's name, net weight, type and delivery date*
- For forage production that is stored, determination of production must be based on weights or measurements and conversion factors consistent with procedures used for loss adjustment

RMA Crop Production and Revenue Insurance Products

APH Yields for Forage Productions

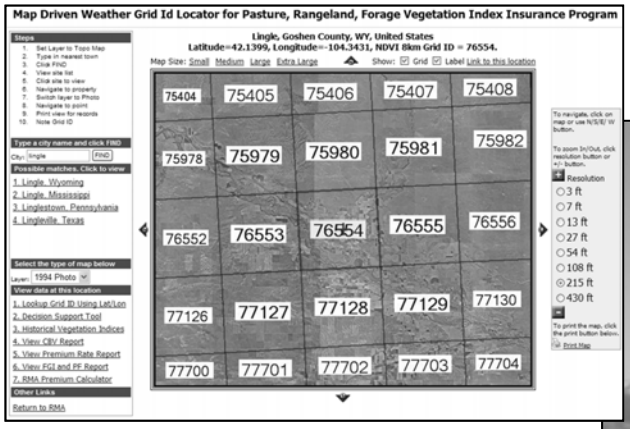
- Weight determination of forage
  - *Large round bales: If the automated baler is acceptable, multiply the number of bales by the average weight of at least two bales and multiply by the average bale weight*
  - *Small bales: Weight 3 to 4 bales per insurable unit per harvest*
  - *Loose hay: Consult your RMA or a loss adjustor*
- Forage production fed:
  - *After forage is fed without being sold, feed records must specify the number of head and type of livestock*
  - *Records must include estimated weights and number of days fed*
  - *Feed records are only acceptable for the current crop year*

APH Yields for Forage Production

RMA suggestions:

- Weigh bales on a certified scale
- Take photographs of stack yards to verify bale count
- Keep records by insured unit, type, and cutting

Pasture, Rangeland, Forage Vegetation Index



Introduction to PRF Pilot Insurance Program

The Purpose of PRF

Agricultural production is financially risky. Forage losses from natural hazards, especially drought, are frequent.

PRF insurance is a group risk plan that can help forage and livestock producers manage for potential production losses.

These plans are now available to producers in selected counties and states.

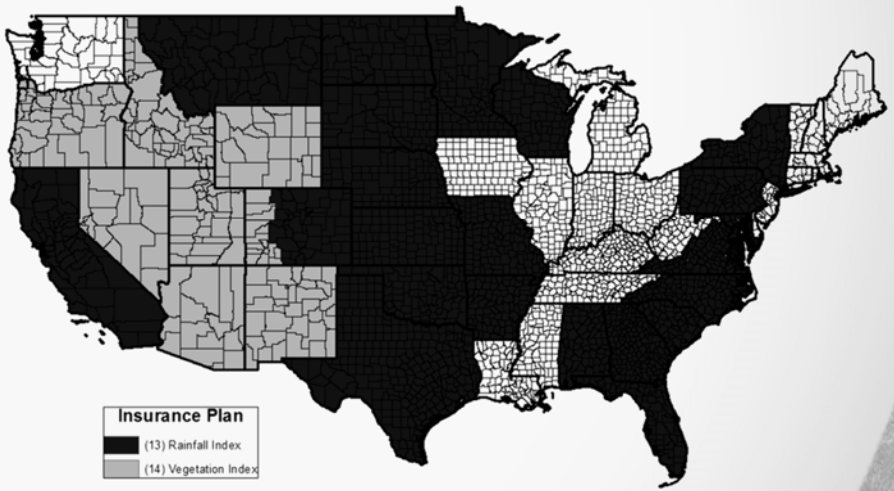
Introduction to PRF Pilot Insurance Program

PRF Program Availability for 2014

The PRF program is a pilot program, and is only available in selected states and counties.

Note: The most current coverage information is available on the USDA-RMA website.

2013 and Succeeding Crop Years - Pasture, Rangeland, Forage Availability



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Introduction to PRF Pilot Insurance Program

Indexing

What is an *index?*

An index is a number derived from a series of observations which is used as an indicator or measure.

PRF insurance uses indexing to measure and compare conditions that affect forage production in specific areas over time.

Each index uses information gathered from a number of sources and locations.

Introduction to PRF Pilot Insurance Program

Vegetation Index

In other selected states, a vegetation index is available. This index uses satellite data to measure vegetation greenness in a 4.8 by 4.8 mile grid. Losses are calculated based on deviation from the vegetation index for the grid during particular time intervals.

Greenness is used to estimate plant conditions for pasture, range, and hay production.

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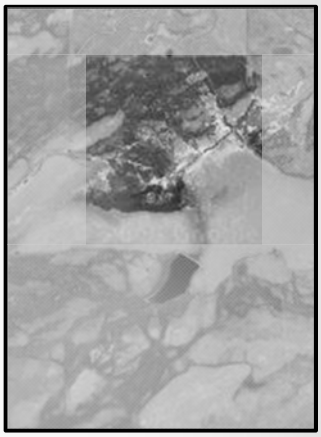
Introduction to PRF Pilot Insurance Program

Vegetation Index Data Source

The PRF Vegetation Index uses data from the U.S. Geological Survey Earth Resources Observation and Science data center.

- Estimates plant condition in approximately 4.8 x 4.8 mile grids.
- This index is not a direct measure of your production. It is a measure of the average vegetation index patterns for the grid.
- The healthier the plants in a given grid, the higher the greenness index will be.

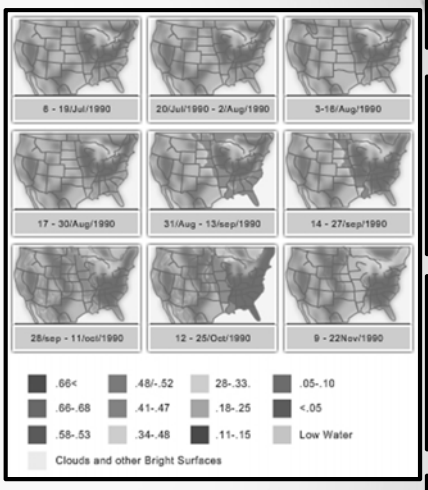


Introduction to PRF Pilot Insurance Program

How Vegetation Data is Measured and Used

The data is called the Normalized Difference Vegetation Index (NDVI).

- NDVI is a measurement of the density of photosynthetic biomass on the ground.
- Results are obtained from the processing of satellite imagery.



Loss payments are based on the difference between the normal NDVI data (expected grid index) and the actual grid index experienced during the months insured.

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Introduction to PRF Pilot Insurance Program

Index Intervals

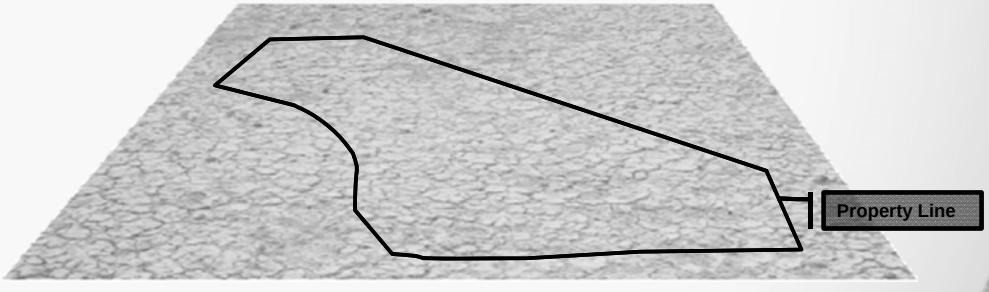
Producers must select the appropriate time frames or index intervals to apply for PRF insurance coverage. It's important to select intervals when forage and pasture production is critical for your operation, and to follow guidelines for your index, county, and grid.




Introduction to PRF Pilot Insurance Program

Grid ID Number

Producers must also select a reference point on the grid that best represents the location of the grazinglands or haylands they want to insure.

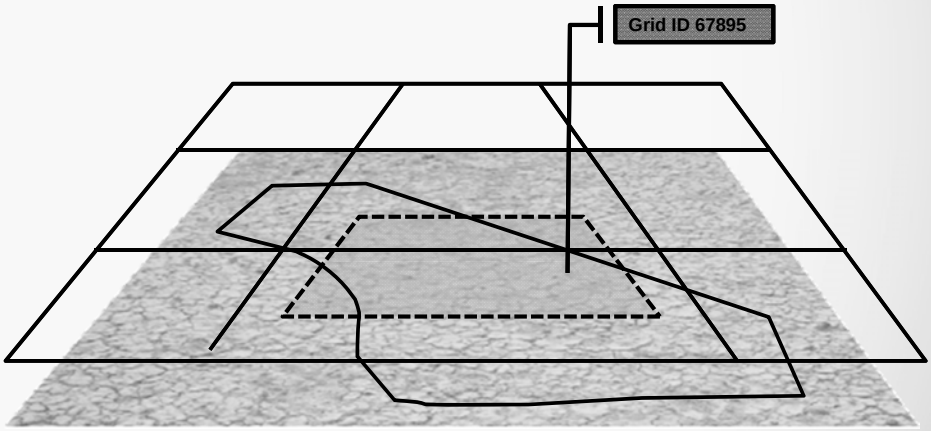





Introduction to PRF Pilot Insurance Program

Grid ID Number

Each grid segment is identified by a grid ID. Rainfall index and vegetation index programs use different grid sizes, so the grid ID will be different depending on which plan is available.

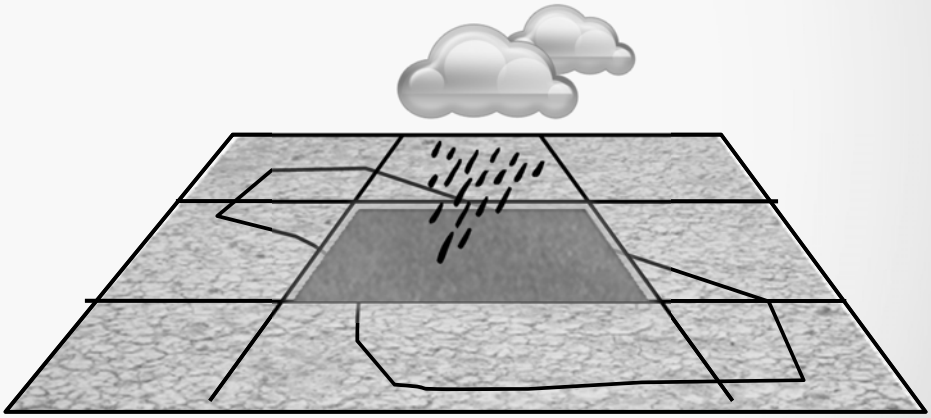





Introduction to PRF Pilot Insurance Program

Expected Index Values

Historical data for each grid is used to determine the expected index value for either precipitation or vegetation greenness.

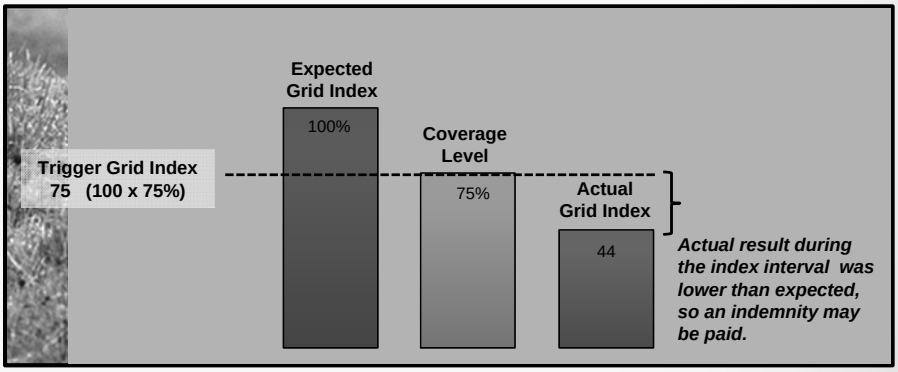





Introduction to PRF Pilot Insurance Program

Using Grid Indices

The expected grid index is compared to the final grid index. Producers may receive an indemnity if the actual final index falls below the trigger grid index, which is adjusted based on the coverage level.

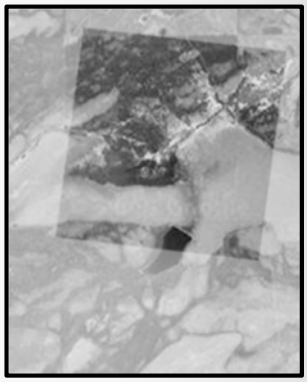


Introduction to PRF Pilot Insurance Program

Key Characteristics of PRF

Coverage is based **on the experience of the entire grid area—not individual losses.** PRF does not take into consideration the exact situation of the producer. It is possible that …

- Grid conditions might have been normal, while a specific property was experiencing drought. A *producer might not receive a payment, even if he or she incurred losses.*
- Final grid indices may have been less than expected, while a producer may not have suffered losses. A *payment might be awarded even though there was no loss of production.*



Introduction to PRF Pilot Insurance Program

Property that Extends Beyond the Grid Area

- A producer can base his or her insurance coverage on a single grid ID or on multiple grid IDs.
- Non-contiguous acres must be insured using the same coverage parameters if they are in the same grid.
- If the non-contiguous acres are in different grids, the coverage parameters can be different.

The rules are complex. Producers should contact an insurance agent familiar with PRF if they have questions.

Introduction to PRF Pilot Insurance Program

Important Dates

January

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

February

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28						

March

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

April

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

May

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

June

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

July

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

August

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	**31**				

September

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

October

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

November

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	**15**	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

December

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	**31**	

Introduction to PRF Pilot Insurance Program

Flexible Risk Management Strategies

The PRF insurance program is one more option for farmers and ranchers to manage potential losses.

Agricultural operations can choose PRF insurance:

- As a standalone product.
- In combination with other risk management strategies or insurance products.

Producers considering PRF should work closely with an insurance agent to understand their options.




MPCI
Multi Peril Crop Insurance

LGM
Livestock Gross Margin

AGR-Lite

LRP
Livestock Risk Protection

NAP
Non-Insured CROP DISASTER Assistance Program

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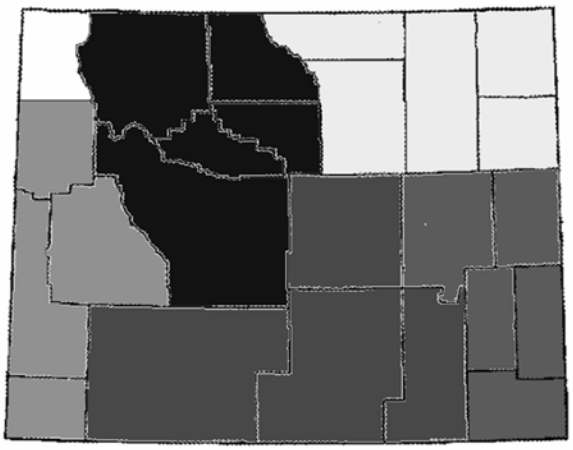
County Base Values- Grazingland 2014 Crop Year



	$8.84
	$8.72
	$7.98
	$7.66
	$7.96

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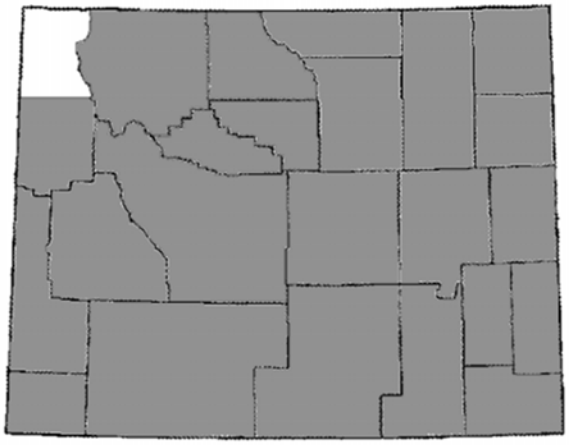
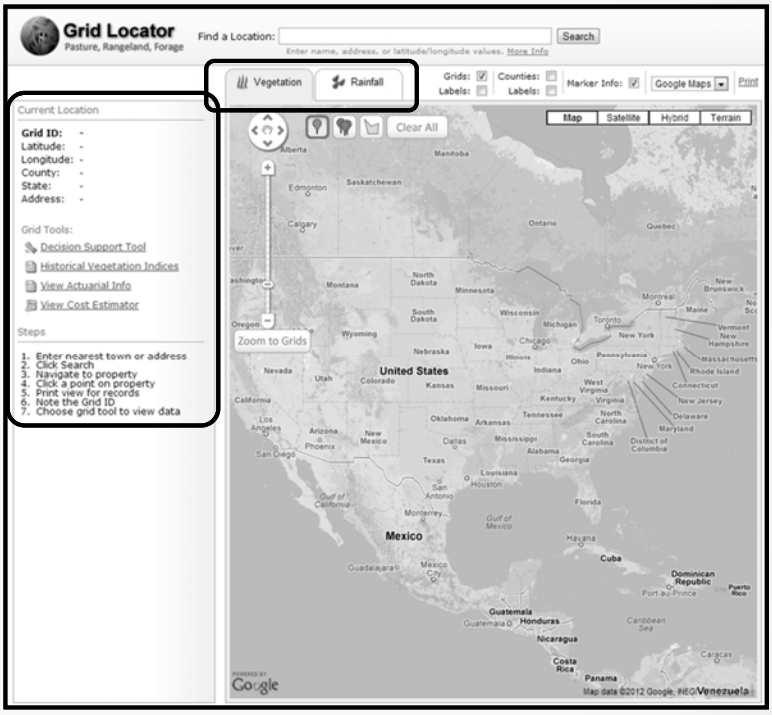
County Base Value- Hayland 2014 Crop Year



$301.08/ac

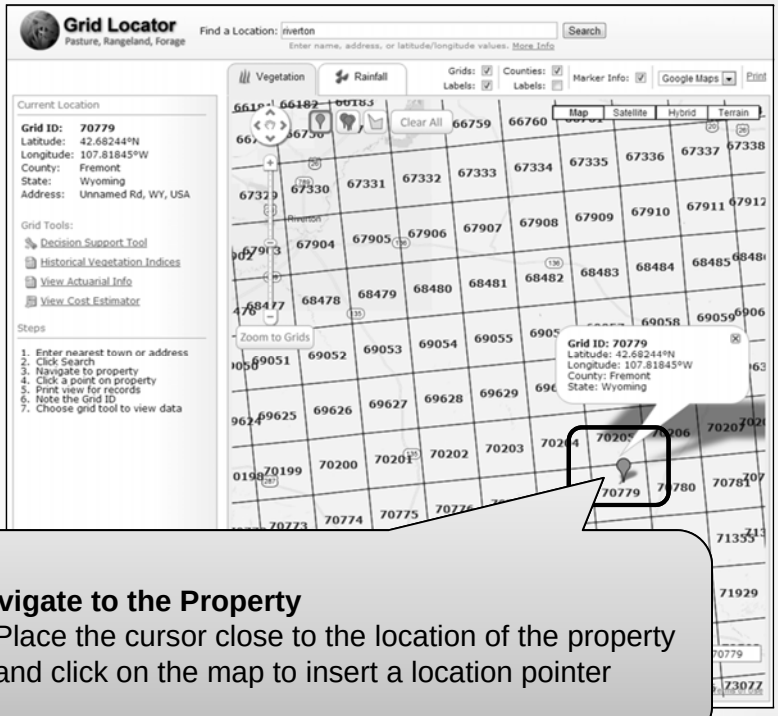
Using the Grid Locator

Enter a Location to Find



Using the Grid Locator

Find the Property



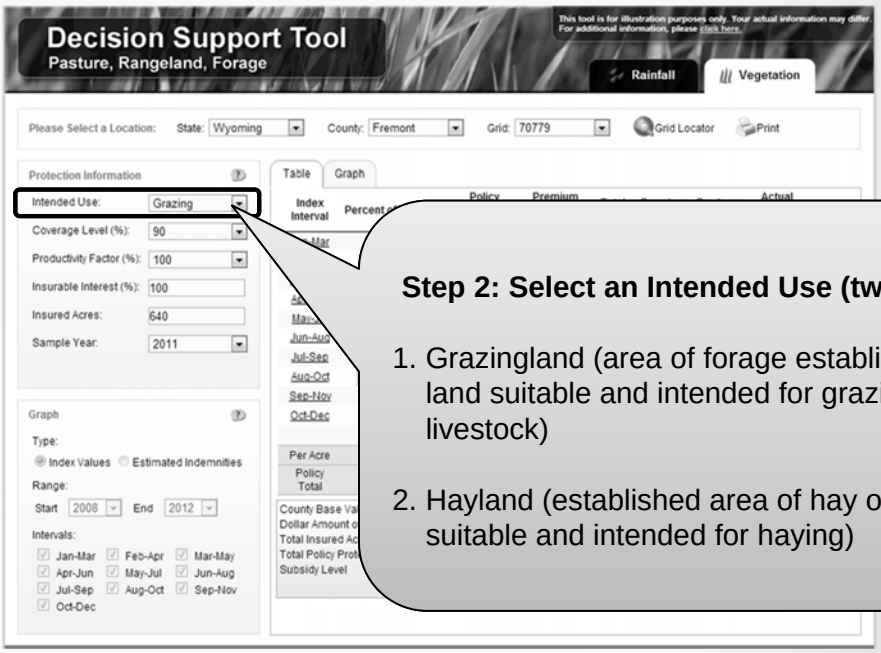
Navigate to the Property

1. Place the cursor close to the location of the property and click on the map to insert a location pointer




Using the Decision Support Tool

Using the Vegetation Index Decision Support Tool

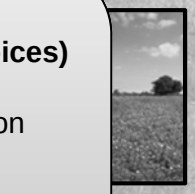


Step 2: Select an Intended Use (two choices)

1. Grazingland (area of forage established on land suitable and intended for grazing livestock)

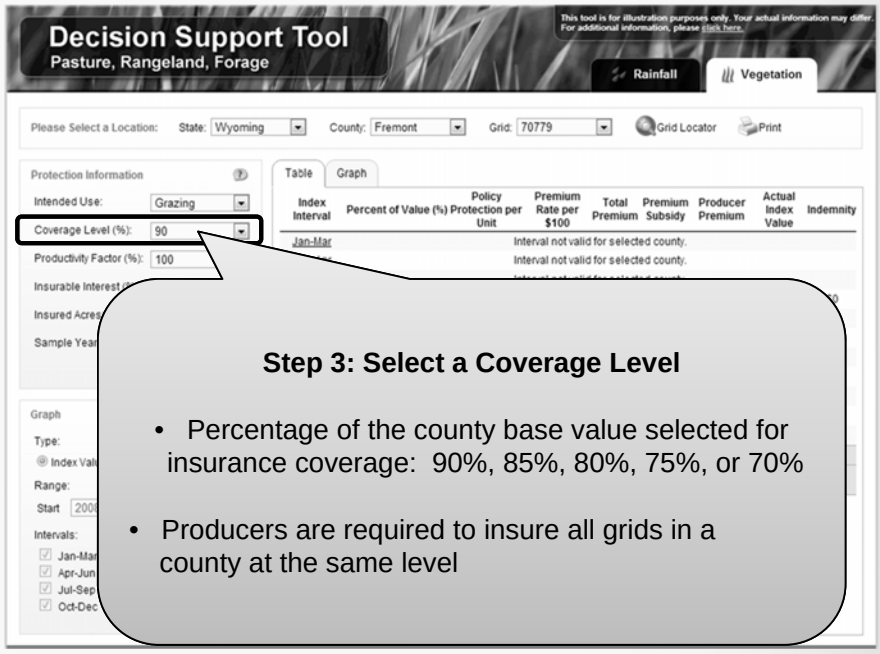
2. Hayland (established area of hay on land suitable and intended for haying)






Using the Decision Support Tool

Using the Vegetation Index Decision Support Tool



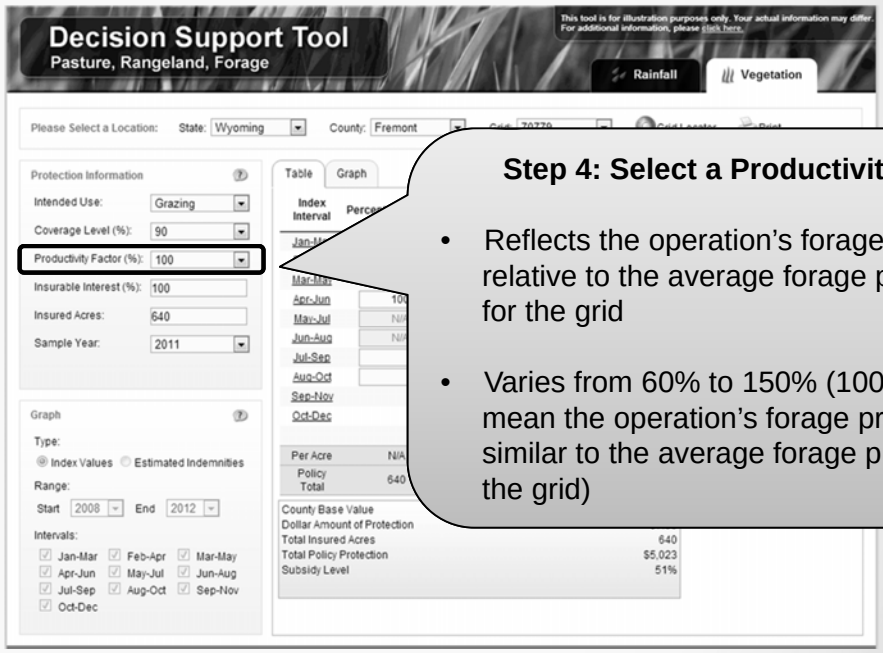
Step 3: Select a Coverage Level

- Percentage of the county base value selected for insurance coverage: 90%, 85%, 80%, 75%, or 70%
- Producers are required to insure all grids in a county at the same level




Using the Decision Support Tool

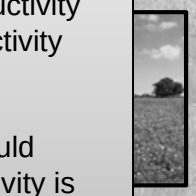
Using the Vegetation Index Decision Support Tool



Step 4: Select a Productivity Factor

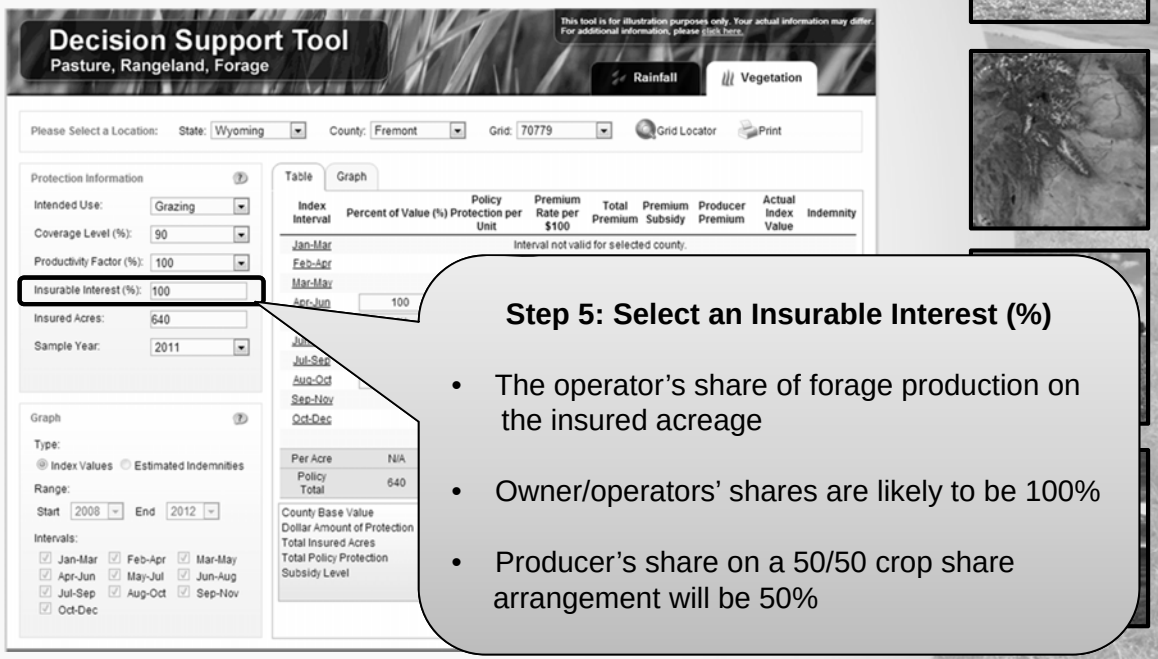
- Reflects the operation's forage productivity relative to the average forage productivity for the grid
- Varies from 60% to 150% (100% would mean the operation's forage productivity is similar to the average forage productivity for the grid)






Using the Decision Support Tool

Using the Vegetation Index Decision Support Tool

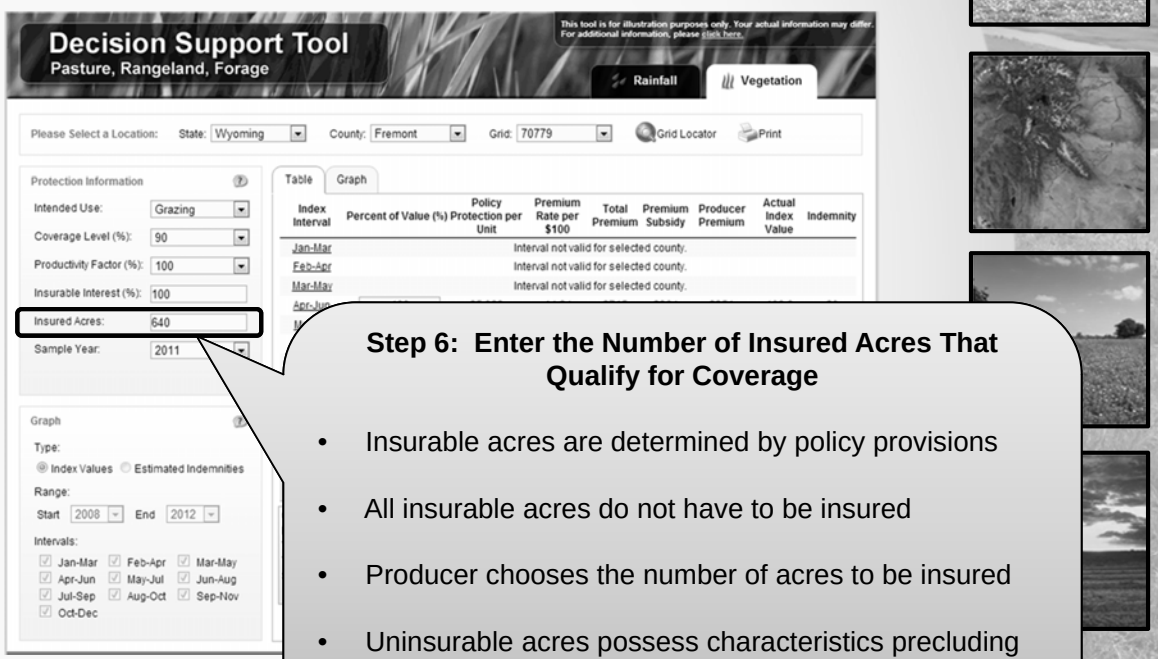


Step 5: Select an Insurable Interest (%)

- The operator's share of forage production on the insured acreage
- Owner/operators' shares are likely to be 100%
- Producer's share on a 50/50 crop share arrangement will be 50%

Using the Decision Support Tool

Using the Vegetation Index Decision Support Tool

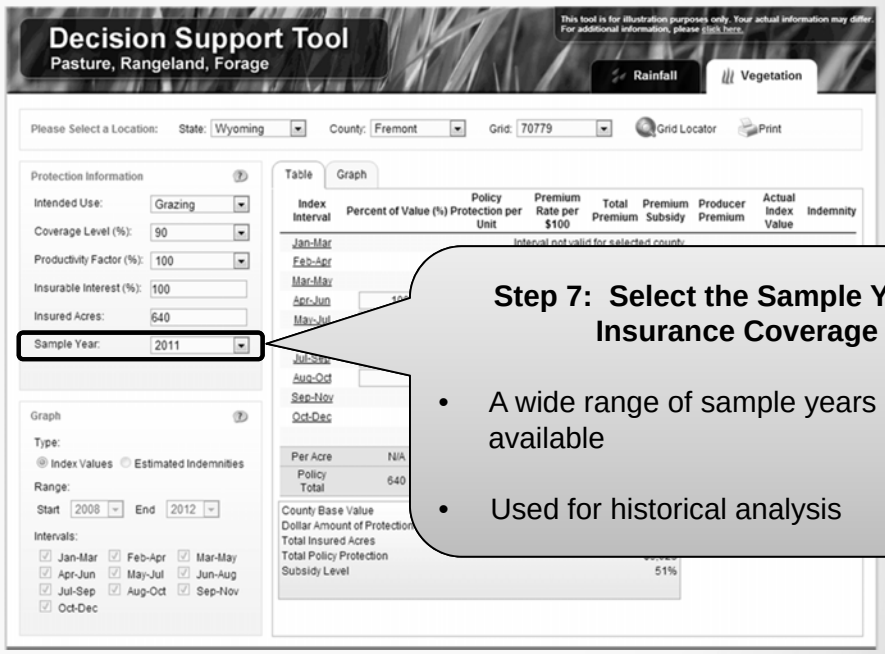


Step 6: Enter the Number of Insured Acres That Qualify for Coverage

- Insurable acres are determined by policy provisions
- All insurable acres do not have to be insured
- Producer chooses the number of acres to be insured
- Uninsurable acres possess characteristics precluding grazing or hay production

Using the Decision Support Tool

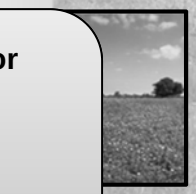
Using the Vegetation Index Decision Support Tool



Step 7: Select the Sample Year for Insurance Coverage

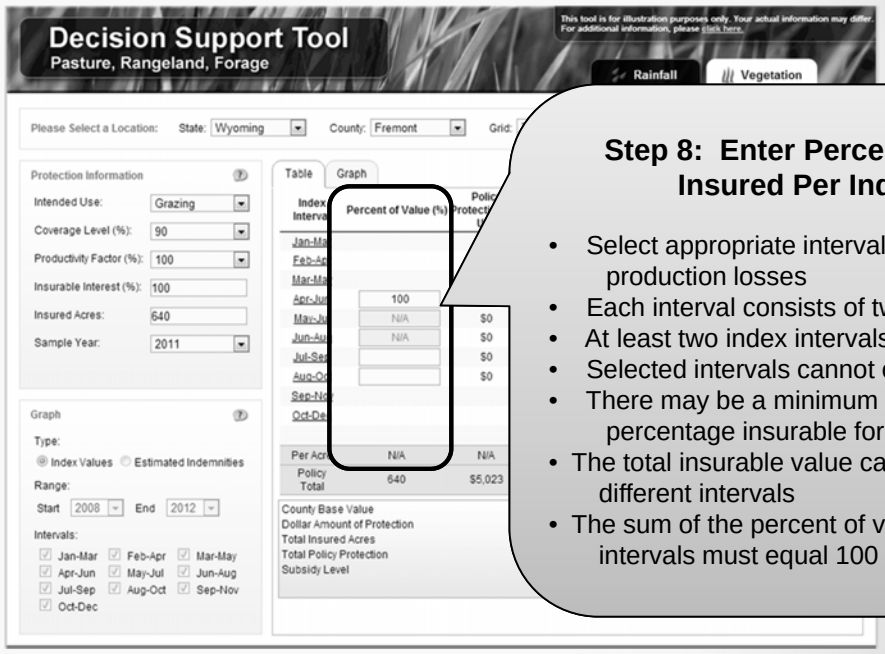
- A wide range of sample years are available
- Used for historical analysis





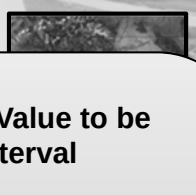

Using the Decision Support Tool

Using the Vegetation Index Decision Support Tool



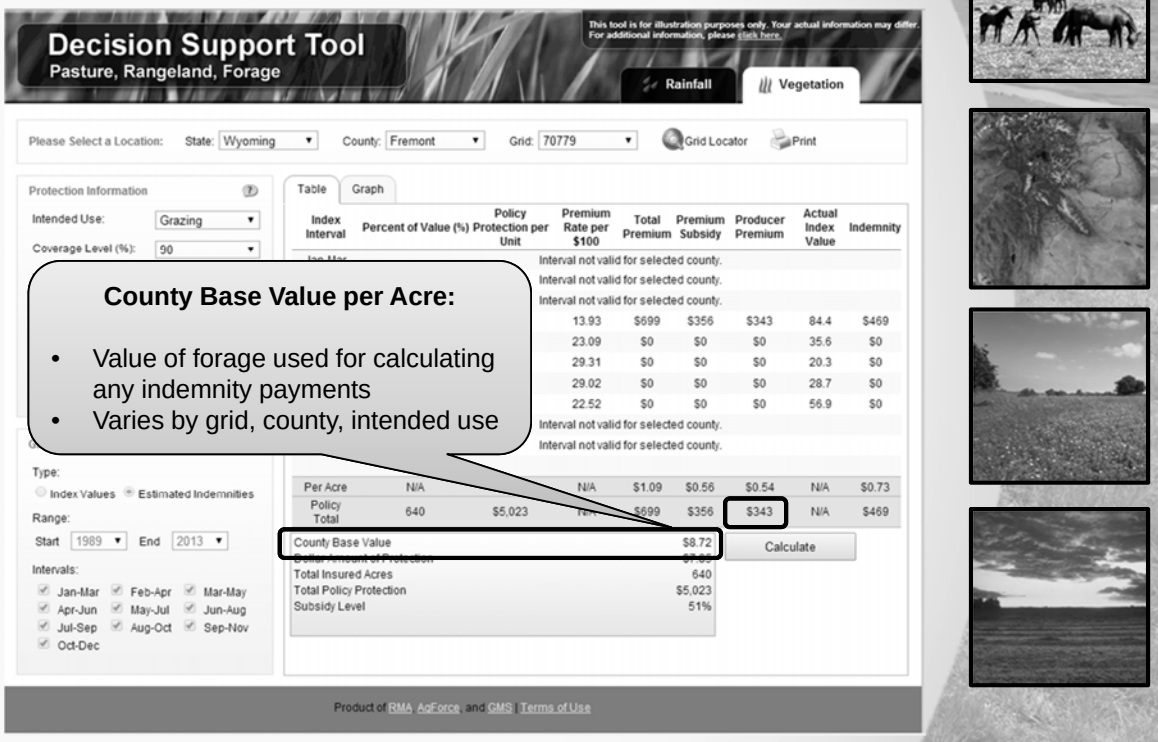
Step 8: Enter Percent of Value to be Insured Per Index Interval

- Select appropriate intervals to protect against production losses
- Each interval consists of two consecutive months
- At least two index intervals must be insured
- Selected intervals cannot overlap
- There may be a minimum and maximum percentage insurable for a single interval
- The total insurable value can be insured across different intervals
- The sum of the percent of value insured for all intervals must equal 100

Using the Decision Support Tool

Using the Vegetation Index Decision Support Tool

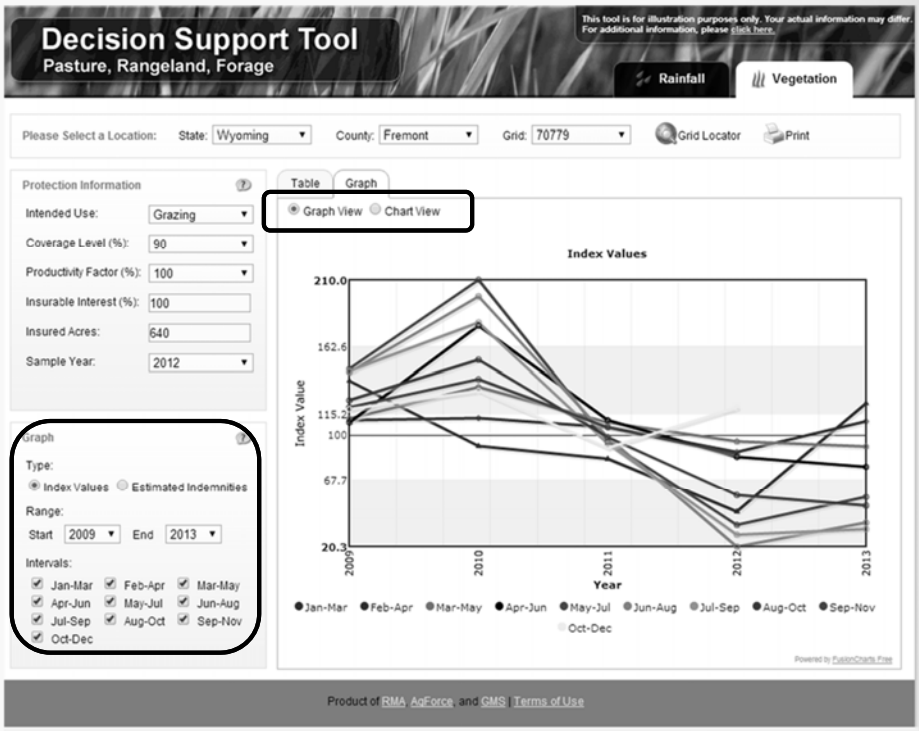


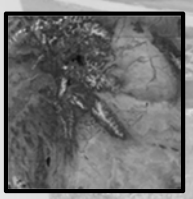
County Base Value per Acre:

- Value of forage used for calculating any indemnity payments
- Varies by grid, county, intended use

Using the Decision Support Tool

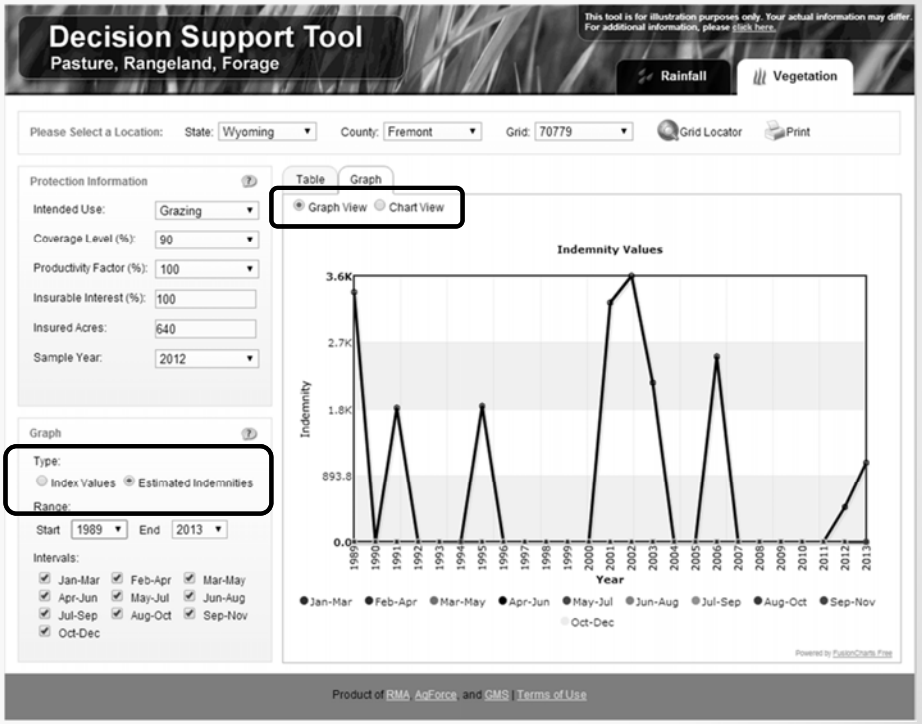
Using the Vegetation Index Decision Support Tool

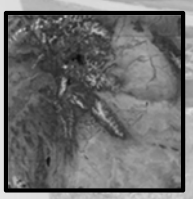




Using the Decision Support Tool

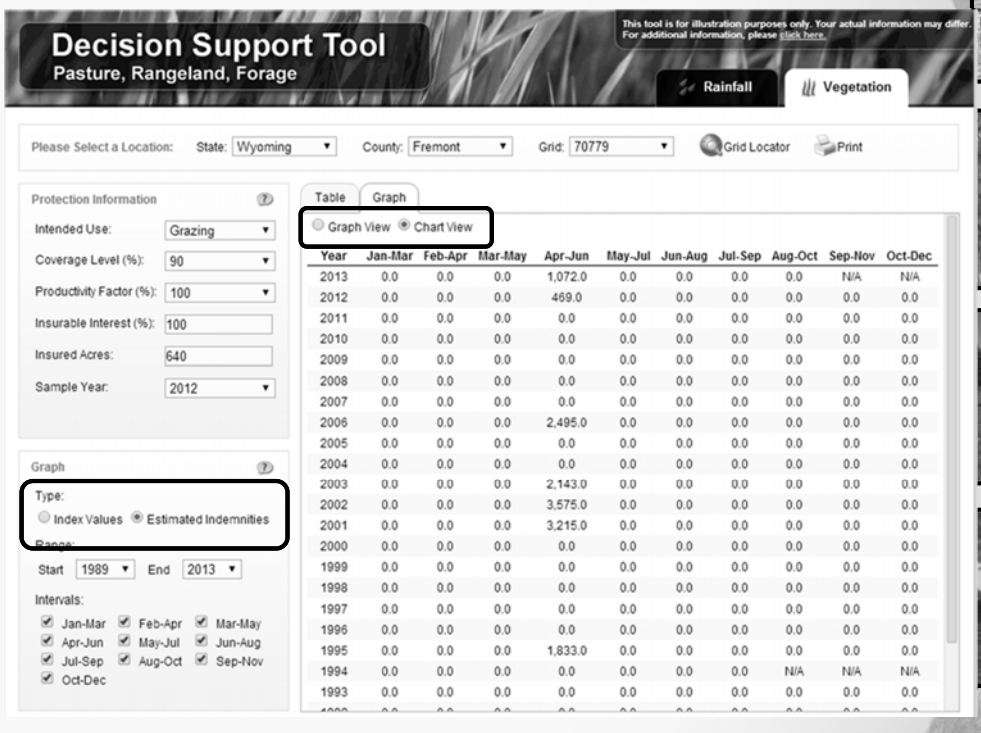
Using the Vegetation Index Decision Support Tool

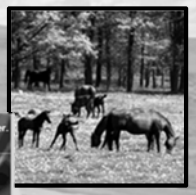


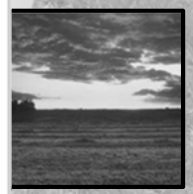


Using the Decision Support Tool

Using the Vegetation Index Decision Support Tool







Using the Decision Support Tool

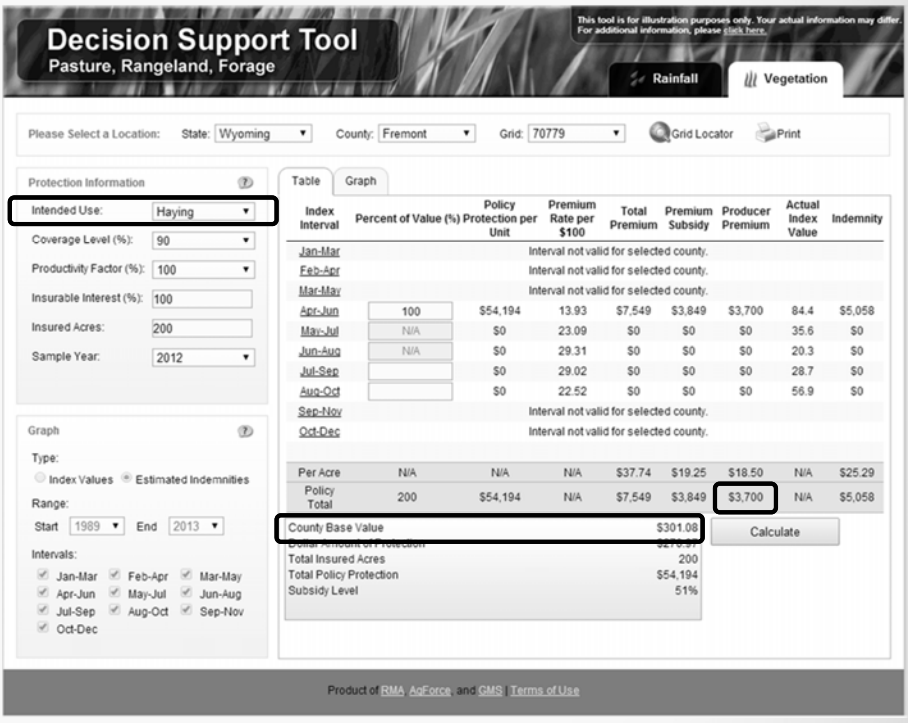
PASTURE

Year	Jan-Mar	Feb-Apr	Mar-May	Apr-Jun	May-Jul	Jun-Aug	Jul-Sep	Aug-Oct	Sep-Nov	Oct-Dec	Premium
2013	0	0	0	1,072.00	0	0	0	0	N/A	N/A	343
2012	0	0	0	469	0	0	0	0	0	0	343
2011	0	0	0	0	0	0	0	0	0	0	343
2010	0	0	0	0	0	0	0	0	0	0	343
2009	0	0	0	0	0	0	0	0	0	0	343
2008	0	0	0	0	0	0	0	0	0	0	343
2007	0	0	0	0	0	0	0	0	0	0	343
2006	0	0	0	2,495.00	0	0	0	0	0	0	343
2005	0	0	0	0	0	0	0	0	0	0	343
2004	0	0	0	0	0	0	0	0	0	0	343
2003	0	0	0	2,143.00	0	0	0	0	0	0	343
2002	0	0	0	3,575.00	0	0	0	0	0	0	343
2001	0	0	0	3,215.00	0	0	0	0	0	0	343
2000	0	0	0	0	0	0	0	0	0	0	343
1999	0	0	0	0	0	0	0	0	0	0	343
1998	0	0	0	0	0	0	0	0	0	0	343
1997	0	0	0	0	0	0	0	0	0	0	343
1996	0	0	0	0	0	0	0	0	0	0	343
1995	0	0	0	1,833.00	0	0	0	0	0	0	343
1994	0	0	0	0	0	0	0	N/A	N/A	N/A	343
1993	0	0	0	0	0	0	0	0	0	0	343
1992	0	0	0	0	0	0	0	0	0	0	343
1991	0	0	0	1,808.00	0	0	0	0	0	0	343
1990	0	0	0	0	0	0	0	0	0	0	343
1989	0	0	0	3,357.00	0	0	0	0	0	0	343
				19,967							8,575
			NET	11,392							



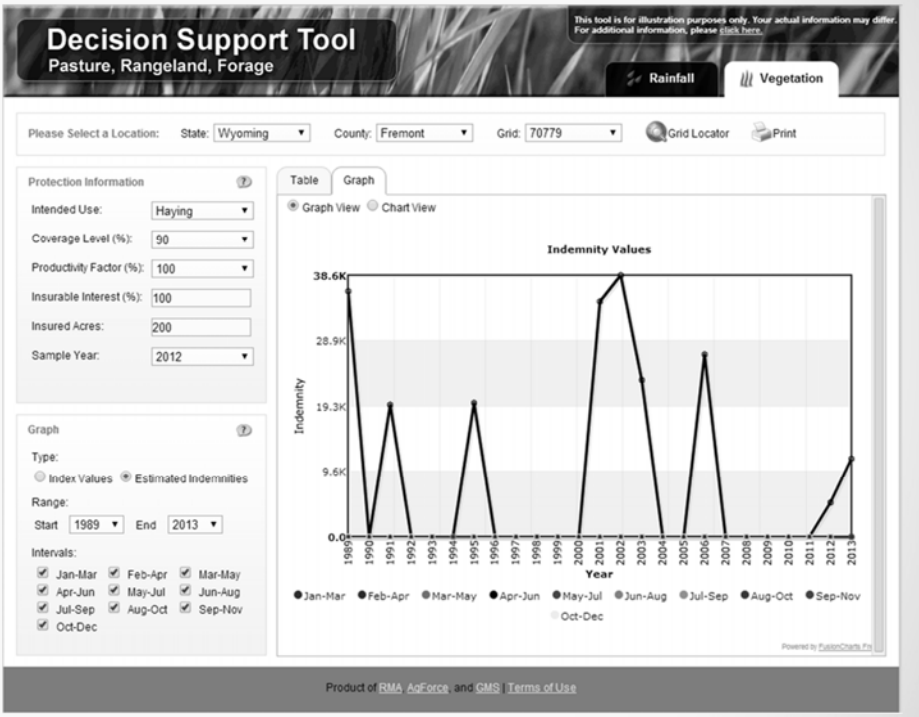

Using the Decision Support Tool

Using the Vegetation Index Decision Support Tool



Using the Decision Support Tool

Using the Vegetation Index Decision Support Tool

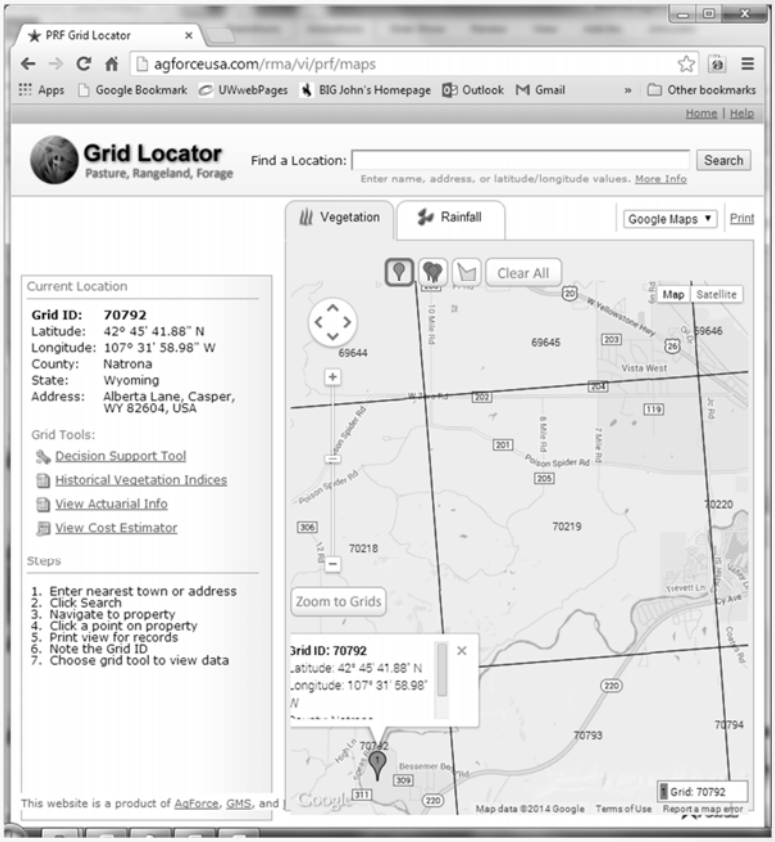


Using the Decision Support Tool

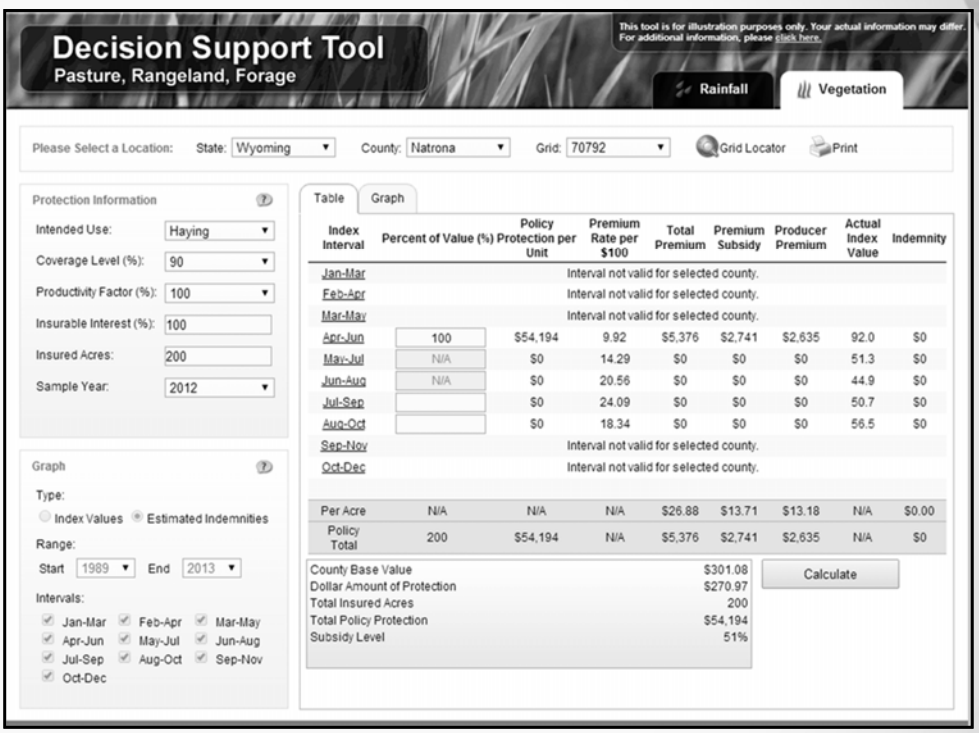
HAYLAND

Year	Jan-Mar	Feb-Apr	Mar-May	Apr-Jun	May-Jul	Jun-Aug	Jul-Sep	Aug-Oct	Sep-Nov	Oct-Dec	Premium
2013	0	0	0	11,561.00	0	0	0	0	N/A	N/A	3,700
2012	0	0	0	5,058.00	0	0	0	0	0	0	3,700
2011	0	0	0	0	0	0	0	0	0	0	3,700
2010	0	0	0	0	0	0	0	0	0	0	3,700
2009	0	0	0	0	0	0	0	0	0	0	3,700
2008	0	0	0	0	0	0	0	0	0	0	3,700
2007	0	0	0	0	0	0	0	0	0	0	3,700
2006	0	0	0	26,916.00	0	0	0	0	0	0	3,700
2005	0	0	0	0	0	0	0	0	0	0	3,700
2004	0	0	0	0	0	0	0	0	0	0	3,700
2003	0	0	0	23,123.00	0	0	0	0	0	0	3,700
2002	0	0	0	38,568.00	0	0	0	0	0	0	3,700
2001	0	0	0	34,684.00	0	0	0	0	0	0	3,700
2000	0	0	0	0	0	0	0	0	0	0	3,700
1999	0	0	0	0	0	0	0	0	0	0	3,700
1998	0	0	0	0	0	0	0	0	0	0	3,700
1997	0	0	0	0	0	0	0	0	0	0	3,700
1996	0	0	0	0	0	0	0	0	0	0	3,700
1995	0	0	0	19,781.00	0	0	0	0	0	0	3,700
1994	0	0	0	0	0	0	0	N/A	N/A	N/A	3,700
1993	0	0	0	0	0	0	0	0	0	0	3,700
1992	0	0	0	0	0	0	0	0	0	0	3,700
1991	0	0	0	19,510.00	0	0	0	0	0	0	3,700
1990	0	0	0	0	0	0	0	0	0	0	3,700
1989	0	0	0	36,220.00	0	0	0	0	0	0	3,700
			-	215,421							92,500
			NET	122,921							

Using the Grid Locator

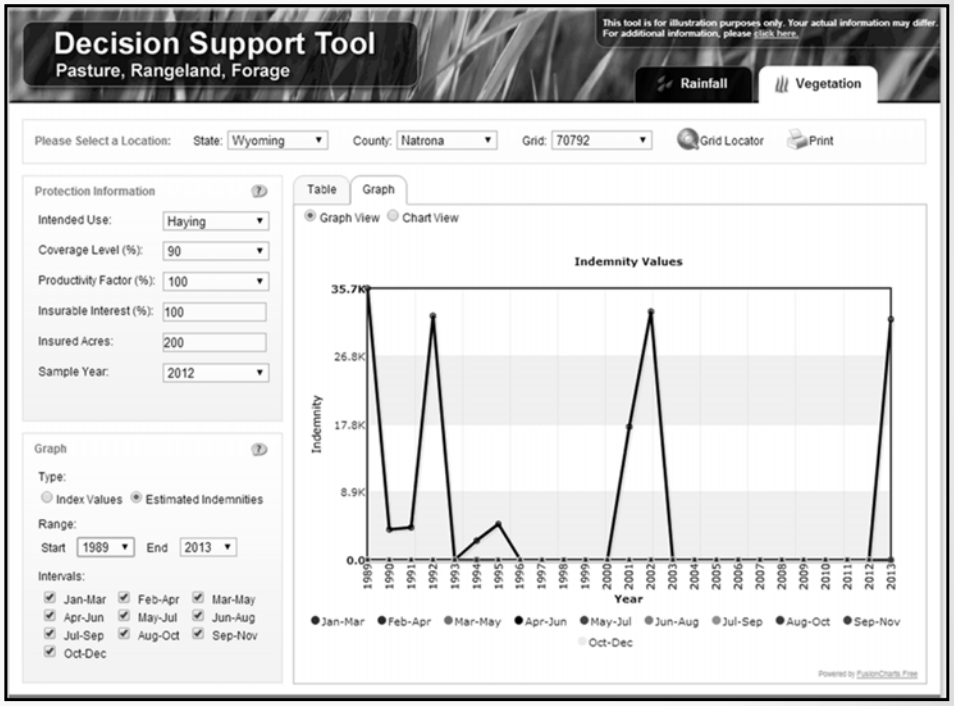


Using the Decision Support Tool



Using the Decision Support Tool

Using the Vegetation Index Decision Support Tool






Using the Decision Support Tool

HAYLAND

Year	Jan-Mar	Feb-Apr	Mar-May	Apr-Jun	May-Jul	Jun-Aug	Jul-Sep	Aug-Oct	Sep-Nov	Oct-Dec	Premium
2013	0	0	0	31,613.00	0	0	0	0	0	N/A	2,635
2012	0	0	0	0.00	0	0	0	0	0	0	2,635
2011	0	0	0	0	0	0	0	0	0	0	2,635
2010	0	0	0	0	0	0	0	0	0	0	2,635
2009	0	0	0	0	0	0	0	0	0	0	2,635
2008	0	0	0	0	0	0	0	0	0	0	2,635
2007	0	0	0	0	0	0	0	0	0	0	2,635
2006	0	0	0	0.00	0	0	0	0	0	0	2,635
2005	0	0	0	0	0	0	0	0	0	0	2,635
2004	0	0	0	0	0	0	0	0	0	0	2,635
2003	0	0	0	0.00	0	0	0	0	0	0	2,635
2002	0	0	0	32,607.00	0	0	0	0	0	0	2,635
2001	0	0	0	17,523.00	0	0	0	0	0	0	2,635
2000	0	0	0	0	0	0	0	0	0	0	2,635
1999	0	0	0	0	0	0	0	0	0	0	2,635
1998	0	0	0	0	0	0	0	0	0	0	2,635
1997	0	0	0	0	0	0	0	0	0	0	2,635
1996	0	0	0	0	0	0	0	0	0	0	2,635
1995	0	0	0	4,697.00	0	0	0	0	0	0	2,635
1994	0	0	0	2,529.00	0	0	0	N/A	N/A	N/A	2,635
1993	0	0	0	0	0	0	0	0	0	0	2,635
1992	0	0	0	32,065.00	0	0	0	0	0	0	2,635
1991	0	0	0	4,245.00	0	0	0	0	0	0	2,635
1990	0	0	0	3,974.00	0	0	0	0	0	0	2,635
1989	0	0	0	35,678.00	0	0	0	0	0	0	2,635
			-	164,931							65,875
			NET:	99,056							

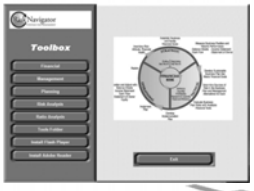


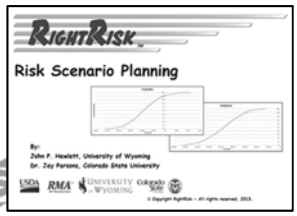

Rangeland Insurance - PRF Vegetation Index Insurance Program: Summary

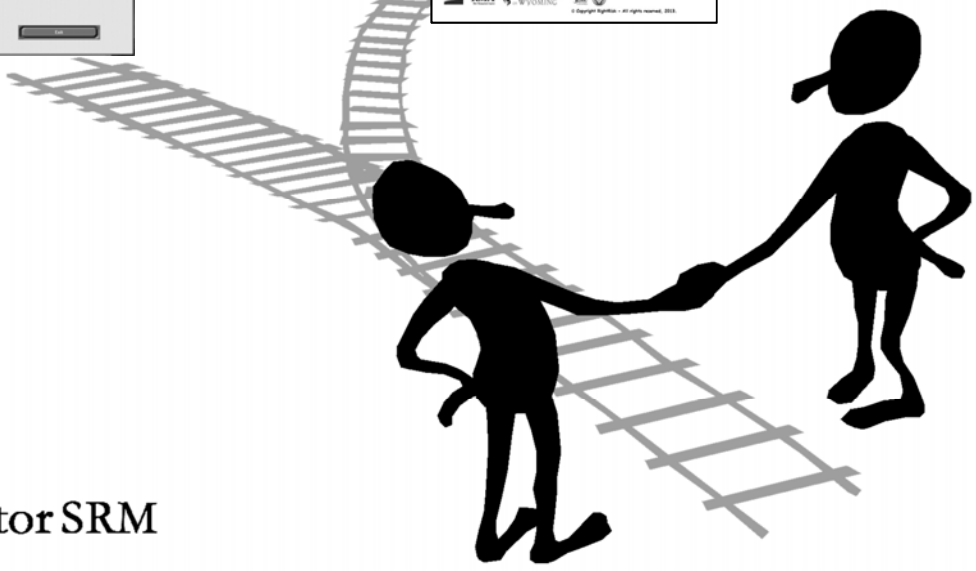
- **2**007 first year for pilot program in Wyoming
- **S**ales closing date is **<u>November 15</u>**
- **T**his program covers <u>grazingland</u> and <u>hay</u> production in all Wyoming counties
- **T**his program is driven off of a vegetation index calculated for several intervals during the crop year (index intervals) that indicate the relative amount of greenness on the ground as a substitute (or proxy variable) for forage production

Profitable & Sustainable AGRICULTURAL SYSTEMS | University of Wyoming | RMA | USDA | RightRisk

Evaluating Alternatives







Fertilizer Inputs

Fertilizer - How Much Can You Afford to Apply?

Fertilizer prices are closely linked to fluctuations in fuel costs. Fossil fuels are heavily utilized in the manufacture and shipping of commercial fertilizer products. As a result, when fuel prices rise fertilizer users must carefully consider:

- Whether or not to fertilize the crop,
- What is the most economical level of fertilizer application, and
- What is the cheapest source of macro (and micro) nutrients.

Crop Considered for Fertilization (choose one):

NITROGEN FERTILIZATION

Native Meadow Hay
Improved Grass Hay
Grass-Alfalfa Hay
Dryland Grass Pasture
Dryland Crested Wheatgrass
Garrison Creeping Foxtail
Corn for Silage
Irrigated Corn for Grain
Malting Barley
Wheat
Dryland Winter Wheat
Sugar Beets-Root Yield

The worksheets at left are designed to help find the most economical level of fertilizer for the crop listed. Examples have been constructed for crops where commercial fertilizers are commonly applied. Some things to keep in mind as you use these tools:

- Fertilizer quantities must be entered in pounds of crop-available nutrient per acre. This will **not** be the same as pounds of fertilizer applied per acre.
  For example: 1 ton (2,000 lb.) of 46-0-0 fertilizer contains 46% nitrogen or 920 lbs. of nitrogen per ton of fertilizer.
- The first entry for fertilizer pounds applied will be zero pounds applied per acre and should have a corresponding yield value. This represents the crop yield with no additional fertilizer applied.
- Zero (0) should be entered for any fertilizer or yield values where additional data is not available.
- Fertilizer costs must be entered on a per pound of available nutrient applied basis. As per above, this will **not** be the same as cost per pound of fertilizer applied per acre.
  For example: 46-0-0 fertilizer at $180/ton yields 920 lb. of nitrogen at 19.57 cents/lb.
- Crop harvest costs should include **all** costs associated with harvesting an additional unit of crop. For example, swath, bale, and stack for a crop of hay.

r Results Generated for:
lfalfa Hay ~

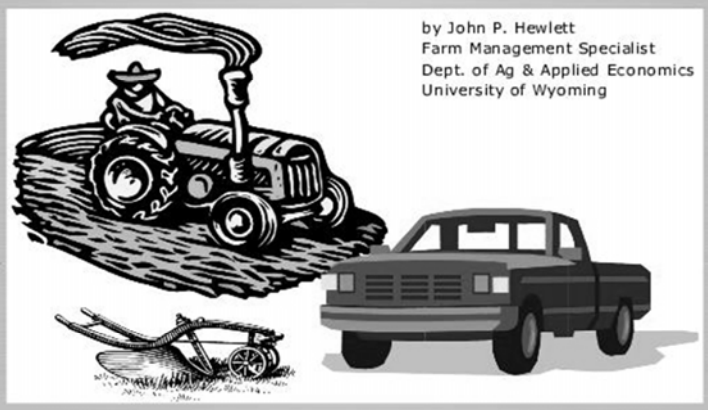
he information you provided in the input form. In ertilizer as long as added return less added cost is

- - Added Costs - - -			
ilizer Pound]	Harvest [$34.19/Ton]	Added Return [$95.00/Ton]	Added Return Less Added Costs
- -	- - -	- - -	- - -
1.20	$15.04	$41.80	$5.56
1.20	$10.94	$30.40	$-1.74
1.20	$6.84	$19.00	$-9.04
1.20	$2.74	$7.60	$-16.34

52

http://RightRisk.org/Wyoming

Wyoming Machinery Cost Calculation Program



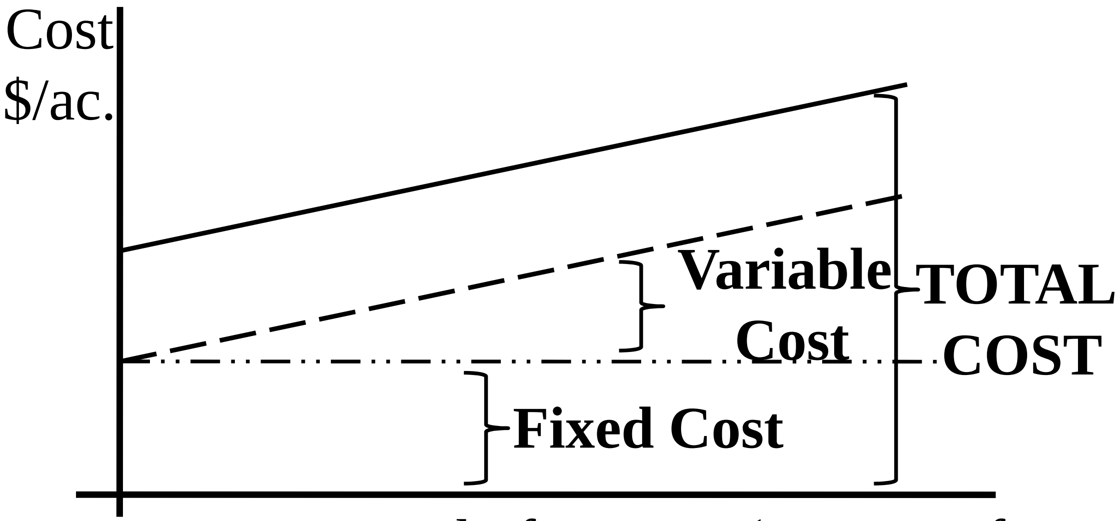
by John P. Hewlett
Farm Management Specialist
Dept. of Ag & Applied Economics
University of Wyoming

Begin

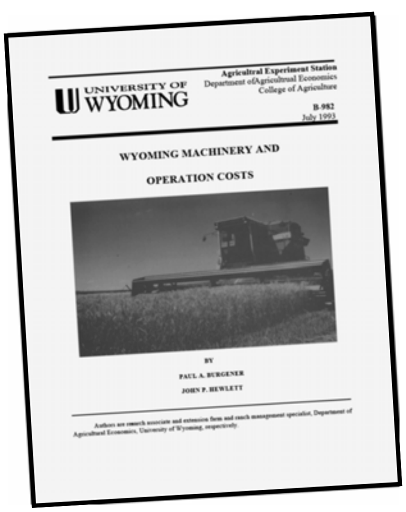
http://RightRisk.org/Wyoming

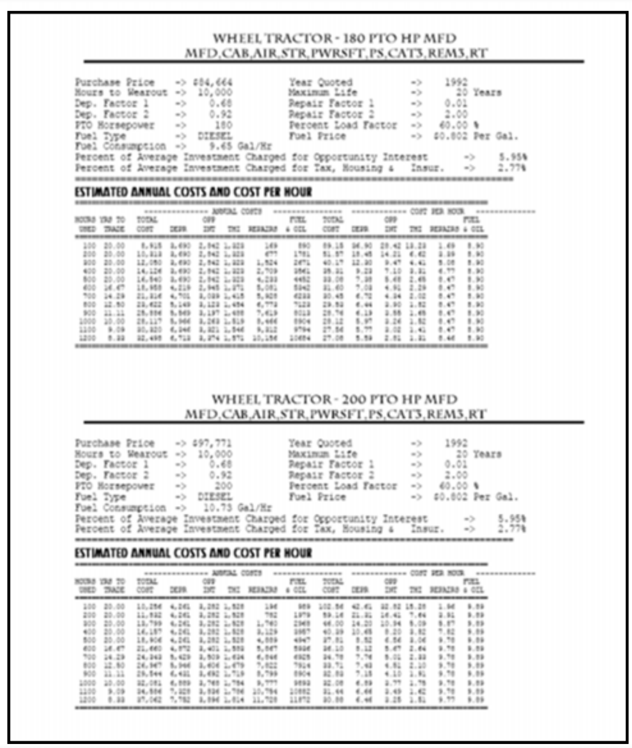
Estimating Machinery Costs

- **O**WNERSHIP or FIXED COSTS
- **O**PERATING or VARIABLE COSTS



Estimating Machinery Costs





WHEEL TRACTOR - 180 PTO HP MFD
MFD,CAB,AIR,STR,PWRSFT,PS,CAT3,REM3,RT

```
Purchase Price    -> $84,664        Year Quoted          ->    1992
Hours to Wearout  -> 10,000         Maximum Life         ->      20 Years
Dep. Factor 1     ->    0.68        Repair Factor 1      ->    0.01
Dep. Factor 2     ->    0.92        Repair Factor 2      ->    2.00
PTO Horsepower    ->     180        Percent Load Factor  ->   60.00 %
Fuel Type         ->  DIESEL        Fuel Price           -> $0.802 Per Gal.
Fuel Consumption  ->    9.65 Gal/Hr
Percent of Average Investment Charged for Opportunity Interest   ->   5.95%
Percent of Average Investment Charged for Tax, Housing &  Insur. ->   2.77%
```

ESTIMATED ANNUAL COSTS AND COST PER HOUR

		ANNUAL COSTS						COST PER HOUR					
HOURS USED	YRS TO TRADE	TOTAL COST	DEPR	OPP INT	THI	REPAIRS	FUEL & OIL	TOTAL COST	DEPR	OPP INT	THI	REPAIRS	FUEL & OIL
100	20.00	8,915	3,690	2,942	1,323	169	890	89.15	36.90	29.42	13.23	1.69	8.90
200	20.00	10,318	3,690	2,942	1,323	677	1781	51.57	18.45	14.71	6.62	3.39	8.90
300	20.00	12,050	3,690	2,942	1,323	1,524	2671	40.17	12.30	9.81	4.41	5.08	8.90
400	20.00	14,126	3,690	2,942	1,323	2,709	3561	35.31	9.23	7.35	3.31	6.77	8.90
500	20.00	16,540	3,690	2,942	1,323	4,233	4452	33.08	7.38	5.88	2.65	8.47	8.90
600	16.67	18,958	4,219	2,945	1,371	5,081	5342	31.60	7.03	4.91	2.29	8.47	8.90
700	14.29	21,316	4,701	3,039	1,415	5,928	6233	30.45	6.72	4.34	2.02	8.47	8.90
800	12.50	23,622	5,149	3,123	1,454	6,773	7123	29.53	6.44	3.90	1.82	8.47	8.90
900	11.11	25,886	5,569	3,197	1,488	7,619	8013	28.76	6.19	3.55	1.65	8.47	8.90
1000	10.00	28,117	5,966	3,263	1,519	8,466	8904	28.12	5.97	3.26	1.52	8.47	8.90
1100	9.09	30,320	6,346	3,321	1,546	9,312	9794	27.56	5.77	3.02	1.41	8.47	8.90
1200	8.33	32,498	6,713	3,374	1,571	10,156	10684	27.08	5.59	2.81	1.31	8.46	8.90

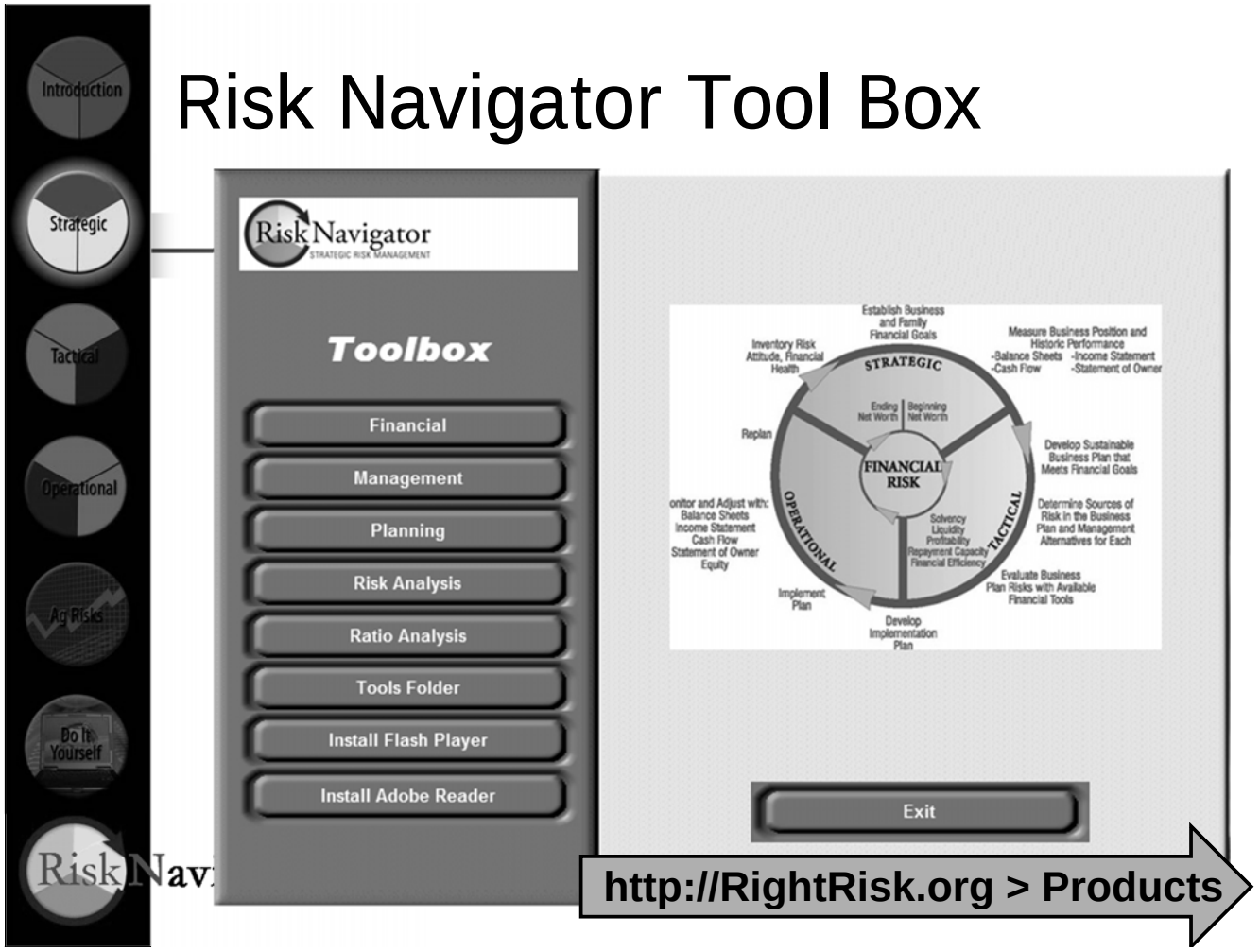
WHEEL TRACTOR - 200 PTO HP MFD
MFD,CAB,AIR,STR,PWRSFT,PS,CAT3,REM3,RT

```
Purchase Price    -> $97,771        Year Quoted          ->    1992
Hours to Wearout  -> 10,000         Maximum Life         ->      20 Years
Dep. Factor 1     ->    0.68        Repair Factor 1      ->    0.01
Dep. Factor 2     ->    0.92        Repair Factor 2      ->    2.00
PTO Horsepower    ->     200        Percent Load Factor  ->   60.00 %
Fuel Type         ->  DIESEL        Fuel Price           -> $0.802 Per Gal.
Fuel Consumption  ->   10.73 Gal/Hr
Percent of Average Investment Charged for Opportunity Interest   ->   5.95%
Percent of Average Investment Charged for Tax, Housing &  Insur. ->   2.77%
```

ESTIMATED ANNUAL COSTS AND COST PER HOUR

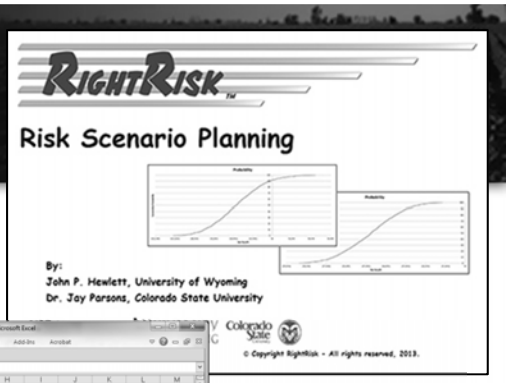
		ANNUAL COSTS						COST PER HOUR					
HOURS USED	YRS TO TRADE	TOTAL COST	DEPR	OPP INT	THI	REPAIRS	FUEL & OIL	TOTAL COST	DEPR	OPP INT	THI	REPAIRS	FUEL & OIL
100	20.00	10,256	4,261	3,282	1,528	196	989	102.56	42.61	32.82	15.28	1.96	9.89
200	20.00	11,532	4,261	3,282	1,528	782	1979	57.66	21.31	16.41	7.64	3.91	9.89
300	20.00	13,799	4,261	3,282	1,528	1,760	2968	46.00	14.20	10.94	5.09	5.87	9.89
400	20.00	16,157	4,261	3,282	1,528	3,129	3957	40.39	10.65	8.20	3.82	7.82	9.89
500	20.00	18,906	4,261	3,282	1,528	4,889	4947	37.81	8.52	6.56	3.06	9.78	9.89
600	16.67	21,660	4,872	3,401	1,583	5,867	5936	36.10	8.12	5.67	2.64	9.78	9.89
700	14.29	24,343	5,429	3,509	1,634	6,846	6925	34.78	7.76	5.01	2.33	9.78	9.89
800	12.50	26,967	5,946	3,606	1,679	7,822	7914	33.71	7.43	4.51	2.10	9.78	9.89
900	11.11	29,544	6,431	3,692	1,719	8,799	8904	32.83	7.15	4.10	1.91	9.78	9.89
1000	10.00	32,081	6,889	3,768	1,754	9,777	9893	32.08	6.89	3.77	1.75	9.78	9.89
1100	9.09	34,586	7,323	3,836	1,786	10,754	10882	31.44	6.66	3.49	1.62	9.78	9.89
1200	8.33	37,062	7,732	3,896	1,814	11,728	11872	30.88	6.44	3.25	1.51	9.77	9.89

Risk Navigator Tool Box



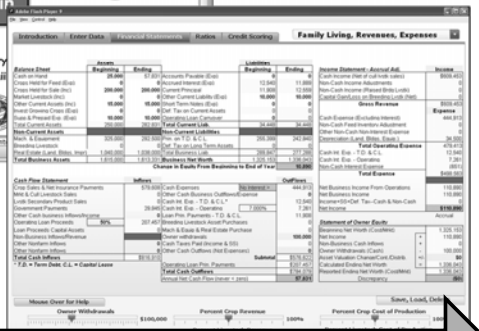
http://RightRisk.org > Products

Tools to Evaluate Alternatives



- Risk Scenario Planner
  relatively minor changes

- Enterprise Budget
  larger changes



- Whole Farm Budget
  substantial changes

http://RightRisk.org/Wyoming

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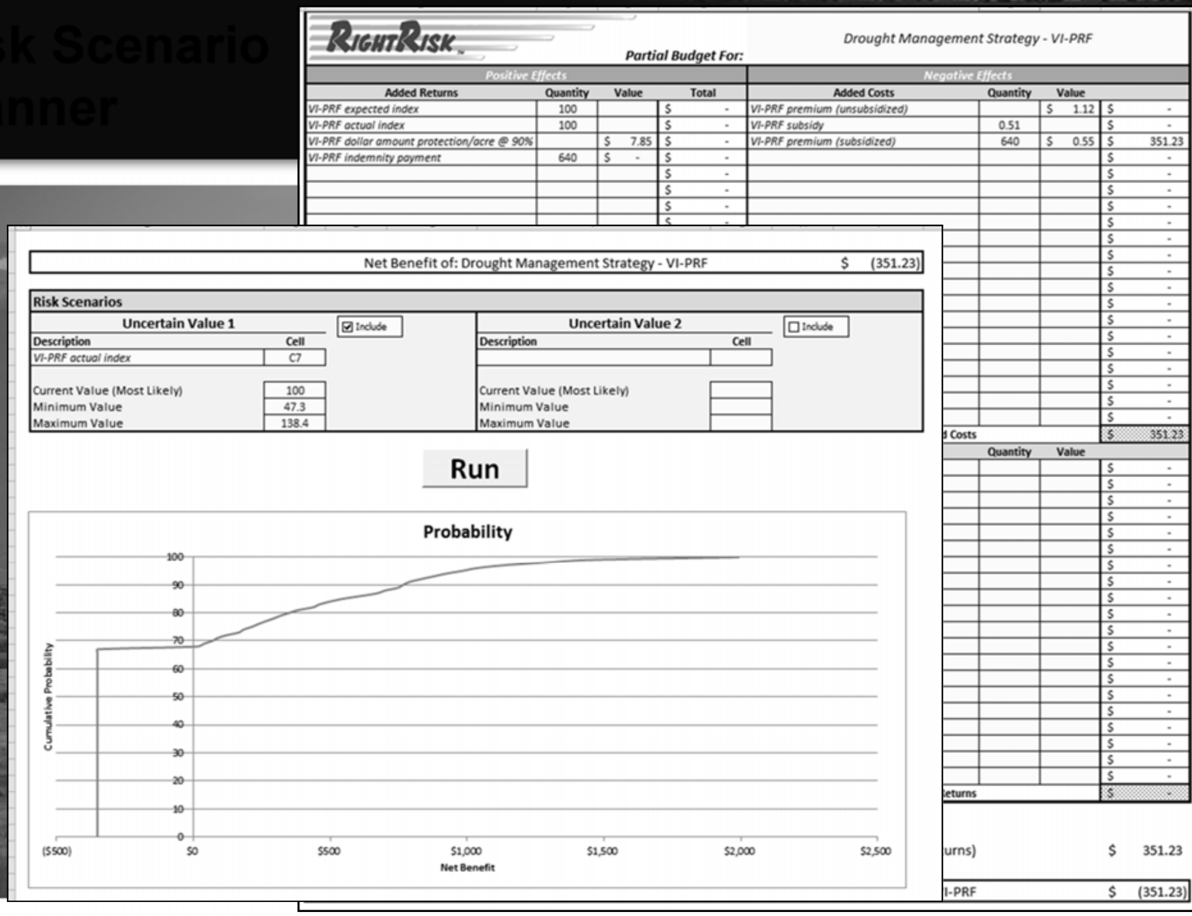
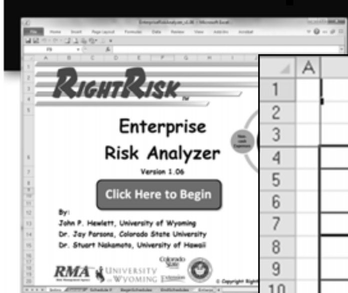
Risk Scenario Planner



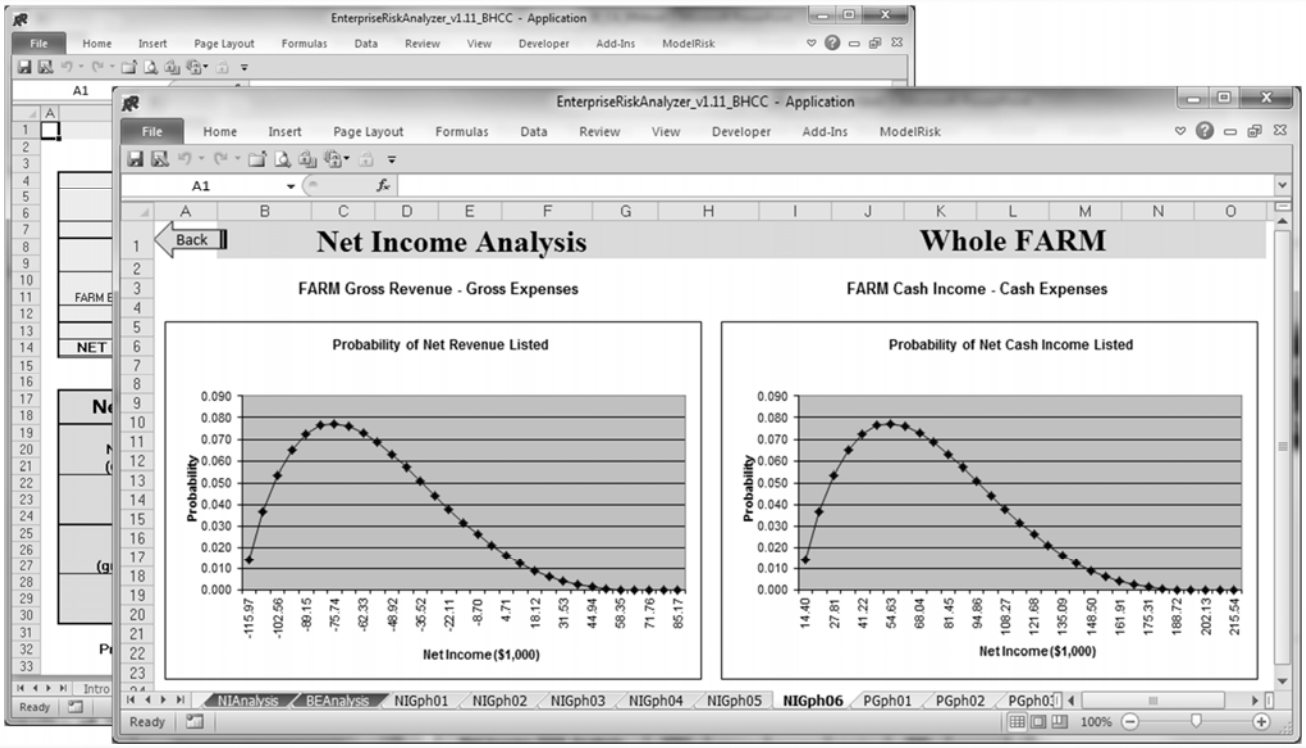
Enterprise Budget



	B	C	D	E	F	G
1						
2–3		Cow-Calf	Native Hay	Oat Hay	Alfalfa Establishment	Alfalfa - Baled
4	FARM REVENUE					
5	TOTAL FARM INCOME - CASH	121,759.00	12,380.00	2,802.00	2,306.00	25,040.00
6	TOTAL NON-CASH INCOME ADJUSTMENTS					
7	GROSS FARM REVENUE	121,759.00	12,380.00	2,802.00	2,306.00	25,040.00
8						
9	FARM EXPENSES					
10	FARM EXPENSES - CASH	86,843.00	6,557.00	1,756.00	2,297.00	12,072.00
11	FARM EXPENSES - NON-CASH EXPENSE ADJUSTMENTS	98,550.00	11,245.00	2,709.00	2,536.00	15,331.00
12	GROSS FARM EXPENSES	185,393.00	17,802.00	4,465.00	4,833.00	27,403.00
13						
14	NET FARM INCOME FROM OPERATIONS	(63,634.00)	(5,422.00)	(1,663.00)	(2,527.00)	(2,363.00)
15						
16	Break-Even PRICE Analysis					
17–18	YIELD PER ENTERPRISE UNIT	Cow-Calf	Native Hay	Oat Hay	Alfalfa Establishment	Alfalfa - Baled
19	*Maximum*	400	1.75	4	4	4
20	***Most Likely***	**373.97**	**1.5**	**3**	**2.54**	**3**
21	*Minimum*	350	1	1.5	1.5	1.5
22						
23	BREAK-EVEN PRICE - CASH EXPENSES					
24	*Minimum*	0.59	32.30	33.77	44.17	29.02
25	***Most Likely***	**0.64**	**37.68**	**45.03**	**69.56**	**38.69**
26	*Maximum*	0.68	56.53	90.05	117.79	77.38
27						
28	BREAK-EVEN PRICE - GROSS EXPENSES					
29	*Minimum*	1.27	87.69	85.87	92.94	65.87
30	***Most Likely***	**1.36**	**102.31**	**114.49**	**146.37**	**87.83**
31	*Maximum*	1.45	153.47	228.97	247.85	175.66
32						
33	Probability Analysis (*click button at right*)	Graph	Graph	Graph	Graph	Graph

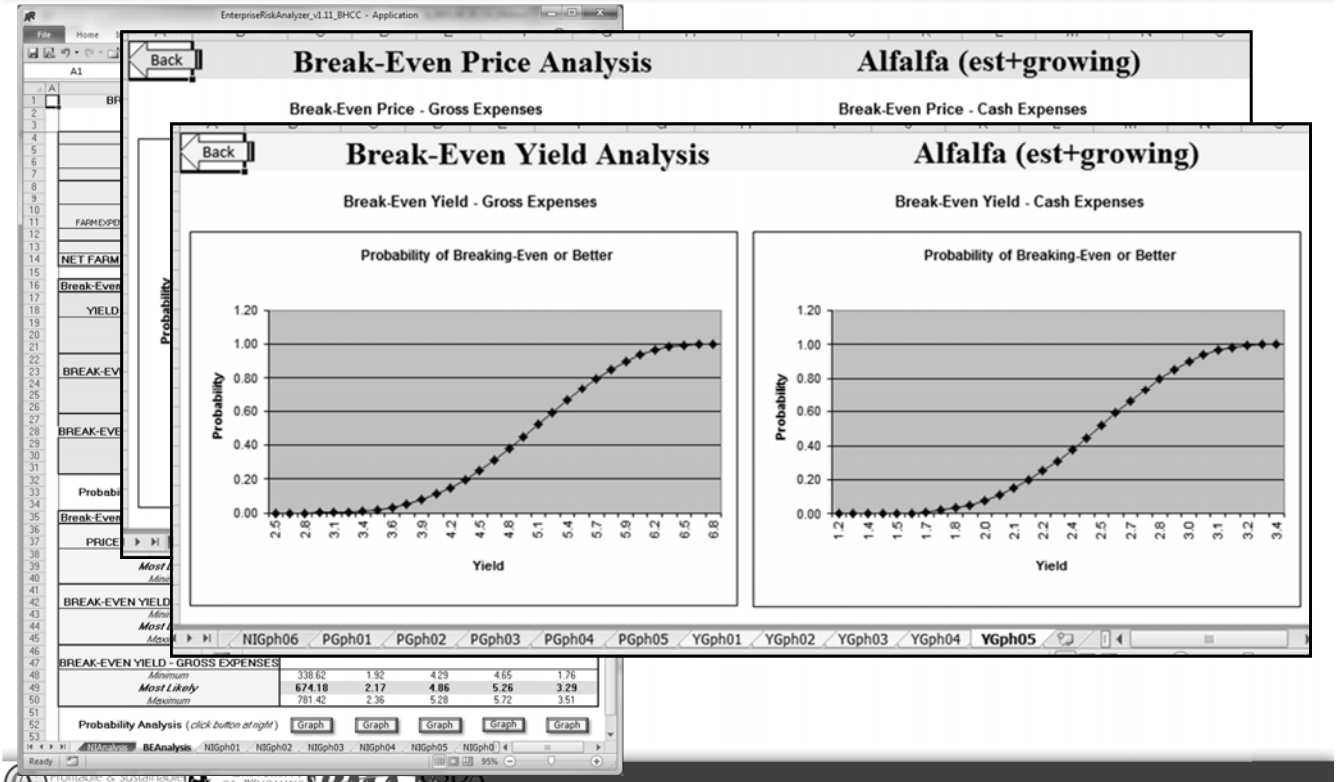
Enterprise Risk Analyzer

Net Return Analysis



Enterprise Risk Analyzer

Breakeven Analysis



Whole Farm Budget

Introduction | Enter Data | Financial Statements | Ratios | Credit Scoring — Family Living, Revenues, Expenses

Balance Sheet	Assets Beginning	Assets Ending		Liabilities Beginning	Liabilities Ending
Cash on Hand	25.000	19.520	Accounts Payable (Exp)	0	0
Crops Held for Feed (Exp)	0	0	Accrued Interest (Exp)	28.759	25.304
Crops Held for Sale (Inc)	100.000	100.000	Current Principal	57.207	60.662
Market Livestock (Inc)	0	0	Other Current Liability (Exp)	0	0
Other Current Assets (Inc)	0	0	Short Term Notes (Exp)	0	0
Invest Growing Crops (Exp)	0	0	Def. Tax on Current Assets	0	0
Supp.& Prepaid Exp. (Exp)	15.000	15.000	Operating Loan Carryover	0	0
Total Current Assets	140.000	134.520	**Total Current Liab.**	85.966	85.966
Non-Current Assets			**Non-Current Liabilities**		
Mach. & Equipment	600.000	570.000	Prin. on T.D. & C.L.	465.178	404.517
Breeding Livestock	169.500	171.000	Def. Tax on Long Term Assets	0	0
Real Estate (Land, Bldgs, Imp	3.190.000	3.161.000	Total Business Liab.	551.144	490.483
Total Business Assets	4.099.500	4.036.520	**Business Net Worth**	3.548.356	3.546.037
			Change in Equity From Beginning to End of Year		(2.319)

Income Statement - Accrual Adj.	Income
Cash Income (Net of cull lvstk sales)	$554.721
Non-Cash Income Adjustments	0
Non-Cash Income (Raised Brdg Lvstk)	17.500
Capital Gain/Loss on Breeding Lvstk (Net)	140
Gross Revenue	$572.361
	Expense
Cash Expense (Excluding Interest)	425.848
Non-Cash Feed Inventory Adjustment	0
Other Non-Cash Non-Interest Expense	0
Depreciation (Land, Bldgs, Equip.)	65.500
Total Operating Expense	491.348
Cash Int. Exp. - T.D. & C.L.	28.759
Cash Int. Exp. - Operating	8.027
Non-Cash Interest Expense	(3.455)
Total Expense	$524.679
Net Business Income From Operations	47.681
Net Business Income	47.681
Income+SS+Def. Tax–Cash & Non-Cash	0
Net Income	**$47.681**
	Accrual

Cash Flow Statement	Inflows		OutFlows
Crop Sales & Net Insurance Payments	445.050	Cash Expenses (No Interest >)	425.848
Mrkt & Cull Livestock Sales	108.703	Other Cash Business Outflows/Expense	0
Lvstk Secondary Product Sales	0	Cash Int. Exp. - T.D. & C.L.*	28.759
Government Payments	18.608	Cash Int. Exp. - Operating (7.000%)	8.027
Other Cash business Inflows/Income	0	Loan Prin. Payments - T.D. & C.L.	57.207
Operating Loan Proceeds (70%)	229.353	Breeding Livestock Asset Purchases	8.000
Loan Proceeds Capital Assets	0	Mach & Equip & Real Estate Purchase	0
Non-Business Inflows/Revenue		Owner withdrawals	50.000
Other Nonfarm Inflows	0	Cash Taxes Paid (Income & SS)	0
Other Nonfarm Inflows	0	Other Cash Outflows (Not Expenses)	0
Total Cash Inflows	$801.714	Subtotal	$577.841
		Operating Loan Prin. Payments	$229.353
		Total Cash Outflows	$807.194
		Annual Net Cash Flow (never < zero)	**19.520**

Statement of Owner Equity		
Beginning Net Worth (Cost/Mrkt)		3.548.356
Net Income	+	47.681
Non-Business Cash Inflows	+	0
Owner Withdrawals (Cash)	-	50.000
Asset Valuation Change/Cont./Distrib.	+/-	$0
Calculated Ending Net Worth	=	3.546.037
Reported Ending Net Worth (Cost/Mrkt)		3.546.037
Discrepancy		$0

* T.D. = Term Debt. C.L. = Capital Lease

Save, Load, Delete

Owner Withdrawals $50,000 | Nonfarm Inflows #1 $0 | Nonfarm Inflows #2 0

Percent Crop Revenue 100% | Percent Livestock Revenue 100% | Percent Operating Expenses Borrowed 70%

Percent Crop Cost of Production 100% | Percent Livestock Cost of Production 100% | Percent Government Payments 100%

Reset | Print | Cash Income Toggle Off/On | Deferred Taxes Off/On | Income Tax Off/On

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RightRisk Newsletter


Volume 1, Issue 11 — November 2013

RightRisk™

RightRisk News

Risk Management Strategies for Livestock Producers

Livestock and bee producers have several risk management options to manage forage production risk. Given recent periods of extreme drought and price variability, managers might consider addressing forage risks using one or more insurance tools. Programs are available and can help protect against serious production losses, while helping to guarantee revenue levels.

Pasture, rangeland, forage (PRF) and Apiculture insurance protect against a decline in an index. The index is designed to serve as a proxy for pasture, range, and hay production in a specific area of land or grid.

The Noninsured Crop Disaster Program (NAP), administered by the Farm Service Agency (FSA) is designed to provide low cost catastrophic loss coverage to producers when federal crop insurance is not available.

NAP coverage may be used separately but not in conjunction with PRF and Apiculture insurance to provide protection against low yields, loss of inventory or prevented planting that occur due to natural disasters for a typical ranch such as: grains planted for hay (and not insured as grain), native (grass) hay and certain mixed forages, and grazingland.

Coverage begins 30 days following sign-up. NAP covers losses of 50 percent or greater of expected production, at 55 percent of the market price (set by the state committee).

The 2008 Farm Bill required that livestock and apiculture producers enroll under either NAP coverage or crop insurance for all pasture, rangeland and native hay forage crops to qualify for certain disaster assistance programs, including the Livestock Forage Disaster Program (LFP) and Emergency Assistance for Livestock, Honey Bees, and Farm-raised Fish Program (ELAP). These requirements are expected under the new Farm Bill (or extension of the 2008 Bill) but are uncertain until new legislation is passed by Congress.

Recent bulletins that outline how these programs may work for operators include: "Production Risk Management Options for Wyoming Ranches: Crop Insurance and Federal Disaster Programs" and "Risk Management Programs for Honey Bee Producers in Wyoming" and may be found in the Western Risk Management Library located under RMA at http://riskmgt.uwagec.org.

More Information is available for the programs mention in this article on the Internet at- www.rightrisk.org; www.rma.usda.gov; or www.fsa.usda.gov.

Dates to Remember

- **November 15, 2013**: Pasture, Rangeland, Forage insurance (PRF)
- **November 15, 2013**: Apiculture
- **November 15, 2013**: Noninsured Crop Disaster Assistance Program (NAP) acreage reporting deadline for forage crops including grazing
- **December 1, 2013**: NAP application deadline for fall seeded crops and forage

How Much Risk is Right for You?

Risk Management Profile

VI-PRF pilot insurance minimizes feed risk for Z-F

Early fall 2010 on the Z-F Ranch found owners Bob and Betsy Zomer assessing risk management strategies for their cow-calf and yearling operation. The Zomers are situated on 12,000 acres of pasture and 200 acres of native hay in Fremont County, Wyoming. Both husband and wife were concerned about the coming production year. This year's late summer and early fall had been dry, and they were worried it would carry over into next year.

To read more see:
RightRisk.org > Resources > Risk Mgt Profiles

Highlighted Course

The Pasture, Rangeland, Forage (PRF) Pilot Insurance Program course available at RightRisk.org offers a step-by-step approach to learn more about PRF insurance and how PRF can be applied. The course includes audio and interactive features, while example farm profiles demonstrate application to real-world examples.

Course materials provide maps to assist in first deciding the type of PRF insurance available in the area. Links to appropriate Web pages help determine the grid identification numbers for individual grids. The next two sections in the course go into greater depth on Vegetative and Rainfall Index policies.

A section of the PRF course explains how to go online to the RMA website and make the most of the cost estimator. Finally, users are encouraged to compare their own yield/historical experience for their grids with that presented in the online decision tool/cost estimator Web pages.

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How much risk is right for you and your operation?

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Introduction

Strategic

Tactical

Operational

Ag Risks

Do It Yourself

Risk Navigator SRM

QUESTIONS?

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