

Drought risk management & tools to evaluate your strategy

Oregon State
UNIVERSITY
Extension Service

The USDA's Risk Management Agency, RightRisk and Oregon State University invite you to join us for **Drought Risk Management and Tools to Evaluate Your Strategy** a risk management workshop that will help your farm thrive in today's challenging environment. Workshop presentations and activities are designed to help you and your family or business partners gain a better understanding of how to manage risk in your farm operation.



Program #1

Wednesday, March 6th 2013

4:00 - 6:30 PM

Deschutes County Extension office

3893 SW Airport Way, Redmond, OR

Deschutes County Fairgrounds - just off parking lot D



WELCOME & OVERVIEW

Toni Stephan, OSU Horticulture and Small Farms Instructor, Deschutes County



OVERVIEW OF RISK AND THE HUMAN DIMENSION OF RISK MANAGEMENT

John Hewlett, Ranch/Farm Management Specialist, University of Wyoming



LIVESTOCK RISK PROTECTION (LRP) AND PRICE RISK MANAGEMENT

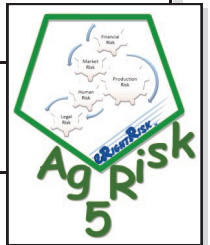
Dr. Jay Parsons, Risk Management Specialist, Colorado State University



PASTURE, RANGELAND, FORAGE (PRF) AND FORAGE RISK MANAGEMENT



INTRODUCTION TO TOOLS TO EVALUATE YOUR RISK MANAGEMENT STRATEGIES



Program #2

Wednesday, March 6th 2013

7:00 - 9:00 PM



PRACTICE USING TOOLS TO EVALUATE YOUR RISK STRATEGIES: Partial Budgets, the Enterprise Risk Analyzer, RDFinancial Buy Hay vs. Sell Cows Evaluator, and More . . .



WRAP UP: WHERE DO WE GO FROM HERE?

John Hewlett and Jay Parsons



Local Contact: For more information or to request special accommodations you may need, please contact Toni Stephan by phone at 541-548-6088 or by email at Toni.Stephan@oregonstate.edu

Registration \$20/person (meal included) - To attend contact:
Toni Stephan - Oregon State University
541-548-6088 ~ Toni.Stephan@oregonstate.edu

RIGHT RISKTM



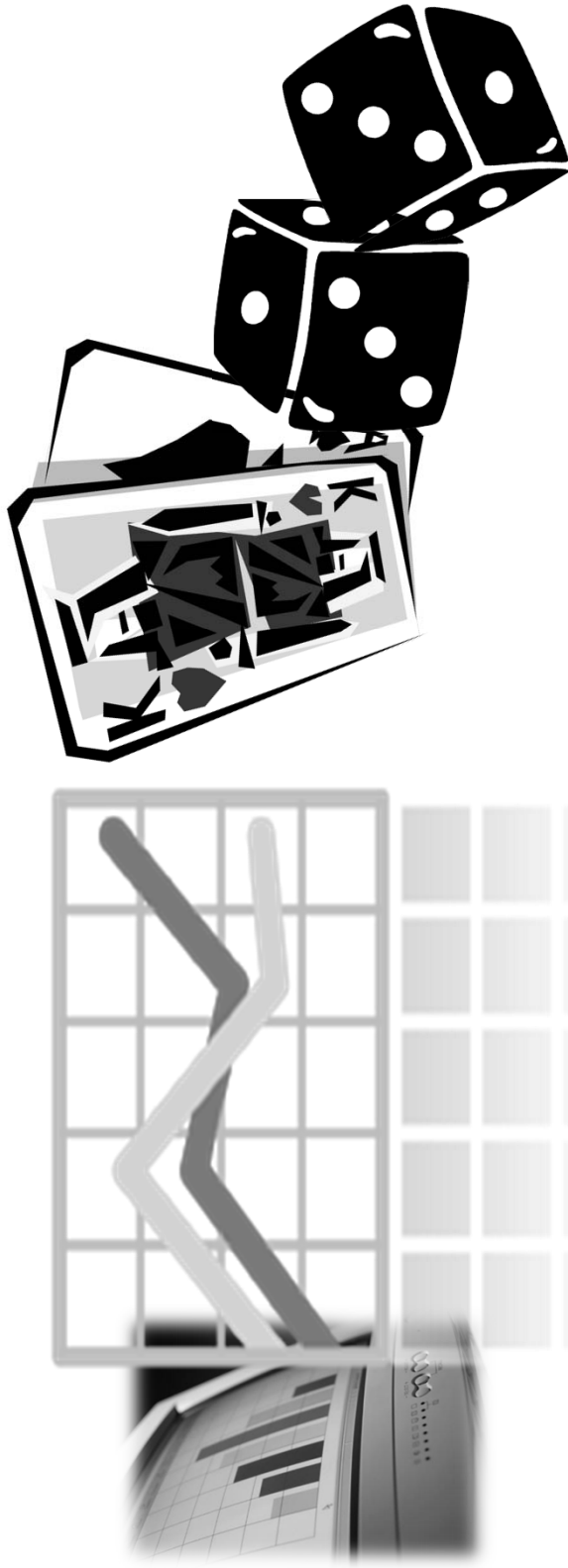
Funded by USDA-RMA Project #12-IE-53102-088,
Project Director Rodney Sharp, RightRisk, LLC

<http://eRightRisk.com>

How Much Risk Is Right For You?

Drought Risk Management and Tools to Evaluate Your Strategy

Risk Management Tools
for Oregon Livestock Operators



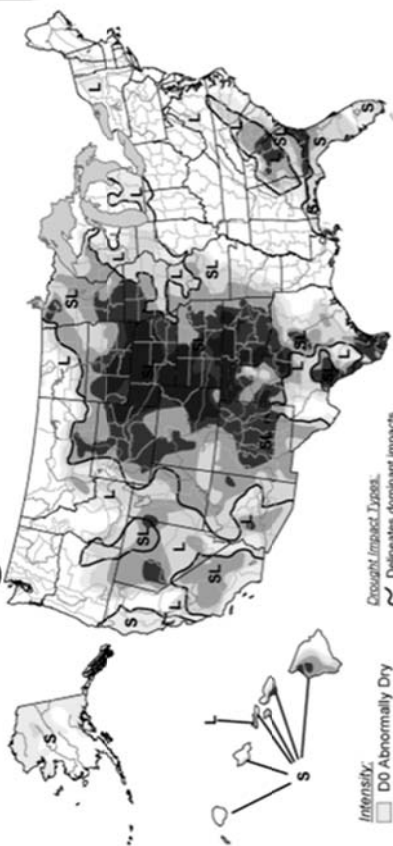
John P. Hewlett – UW Farm/Ranch Management Specialist

Dr. Jay Parsons – CSU Risk Management Specialist



U.S. Drought Monitor

February 19, 2013
Valid 7 a.m. EST



Intensity:
 D0 Abnormally Dry
 D1 Drought - Moderate
 D2 Drought - Severe
 D3 Drought - Extreme
 D4 Drought - Exceptional

Drought Impact Types:
 ✓ Delineates dominant impacts
 S = Short-Term, typically <6 months (e.g. agriculture, grasslands)
 L = Long-Term, typically >6 months (e.g. hydrology, ecology)

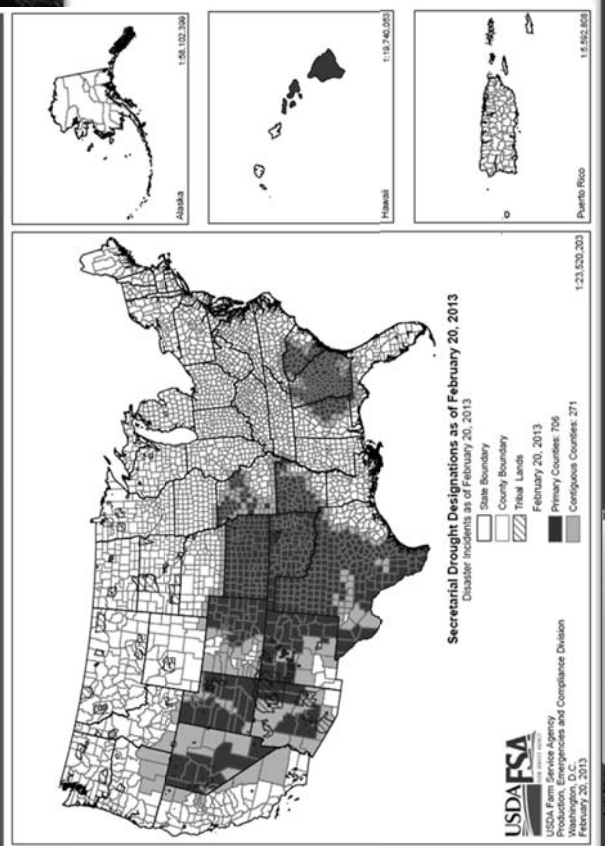
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

<http://droughtmonitor.unl.edu/>

Released Thursday, February 21, 2013
 Author: Brian Fuchs, National Drought Mitigation Center



2013 Secretarial Drought Designations - All Drought



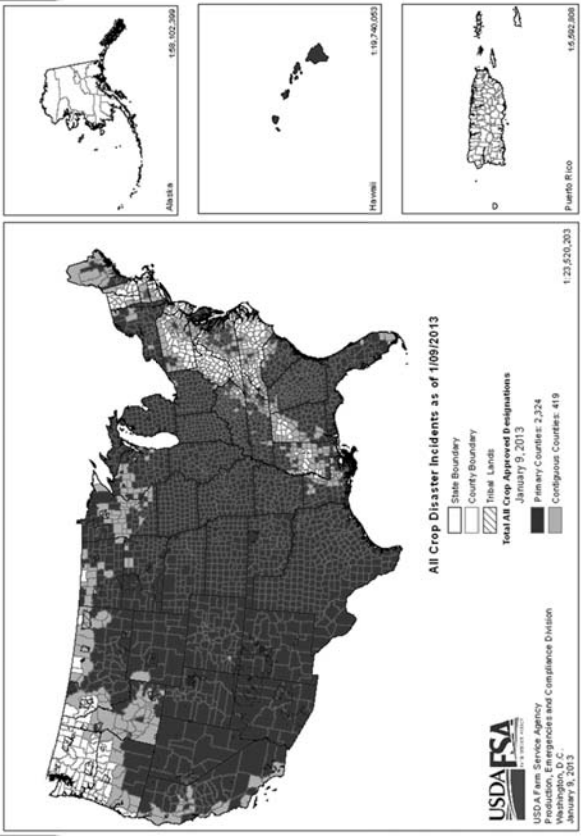
Secretarial Drought Designations as of February 20, 2013
 Disaster Incidents as of February 20, 2013

USDA FSA
 USDA Farm Service Agency
 Production, Emergencies and Compliance Division
 Washington, D.C.
 February 20, 2013

1:21,520,203
 Primary Counties: 706
 Contiguous Counties: 271

Secretarial Disaster Designations - CY 2012

Primary and Contiguous Counties Designated for 2012 Crop Disaster Losses

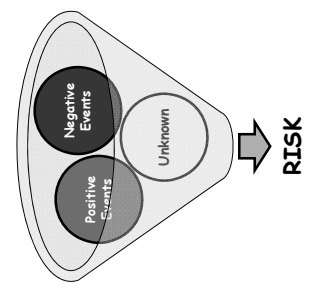


All Crop Disaster Incidents as of 1/09/2013

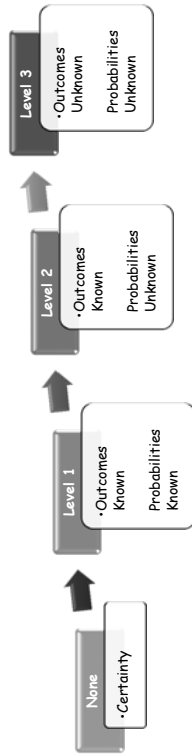
USDA FSA
 USDA Farm Service Agency
 Production, Emergencies and Compliance Division
 Washington, D.C.
 January 9, 2013

1:21,520,203
 Primary Counties: 419
 Contiguous Counties: 419

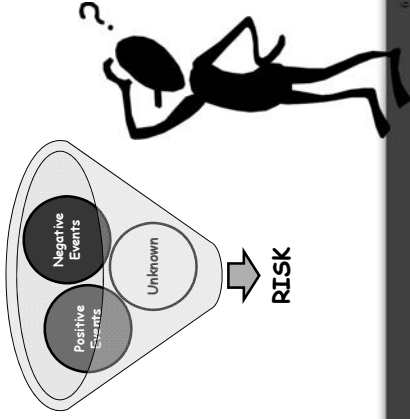
- Certainty- lack of doubt
- Uncertainty- doubt about future events
- RISK- potential variation in the outcome of future events



- **RISK**- potential variation in the outcome of future events

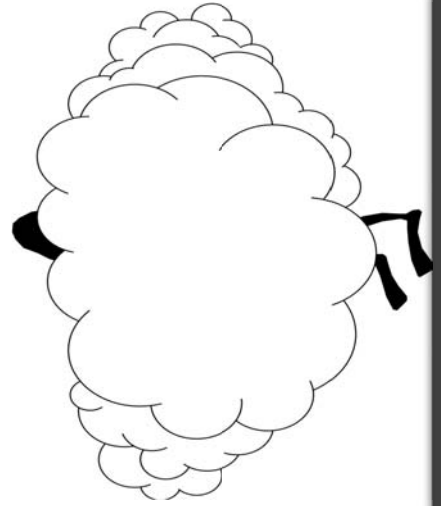


- **Cost of Loss**
 - Income
 - Resources
 - Productive capacity, etc.
- **Cost of Uncertainty**
 - Worry, doubt, fear, misallocation of resources, etc.
 - With potential for gain or loss comes moral or ethical implications



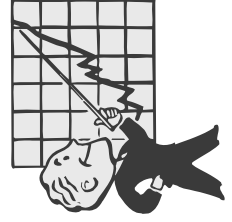
The HUMAN Dimension of Risk

- Emotionally we **avoid risk (uncertainty)** to avoid the shame of:
 - Failure,
 - Being wrong,
 - Being laughed at
 - Being made fun of,
 - Loosing the farm, etc.



Personal Perspectives on Risk

- Generational differences
- Gender differences
- Life stage/family differences
- Life experiences



dynamic and changing over time.

The HUMAN Dimension of Risk

- Humans tend to be **loss averse** more than **risk adverse**
- **Emotion can cloud** the ability to decide rationally
- The way questions about risk are **framed** will influence attitudes about risk
- **Obtaining more information** about certain risks tends to promote a willingness to take those risks
- People tend to ignore that runs of luck tend to **regress to the mean** over time
- Humans do not possess **all information** necessary to decide in an economically rational manner
- Human choice is often based on **inadequate sampling**

Tversky and Kahneman, 1992



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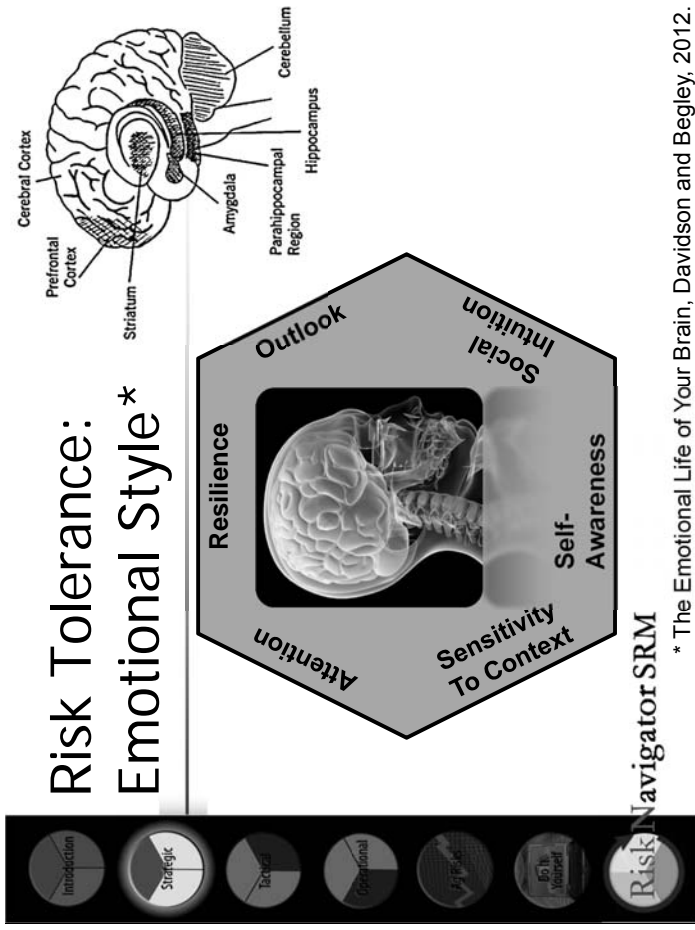
What is RISK?

- The probability of an event occurring that can negatively impact:
 - *Current profit level*
 - *Financial situation (equity position)*
 - *Satisfaction and well-being*



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Risk Tolerance: Emotional Style*



Risk Navigator SRM

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

Types of Risk Preference



Risk Averse



Risk Neutral



Risk Loving

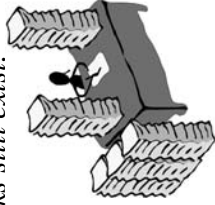


12

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



- **Business Risks:** *Business risks are those risks that occur independently of the way a firm (or farm) is financed. Even with 100% equity (no debt obligations) these risks still exist.*
 - Market/Price risk
 - Production risk
 - Institutional/Legal risk
 - Social risk
 - Legal risk
 - Human risk



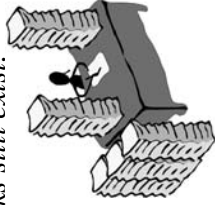
- **Non-Business Risk:** *arise from the obligations created when external financing is used to leverage business operations.*
 - Financial Risk



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- **Business Risks:** *Business risks are those risks that occur independently of the way a firm (or farm) is financed. Even with 100% equity (no debt obligations) these risks still exist.*
 - Market/Price risk
 - Production risk
 - Institutional/Legal risk
 - Social risk
 - Legal risk
 - Human risk



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Profits are returns for taking risks

- **Upside:** Greater risk taking usually leads to greater wealth over time
- **Downside:** Losses from risk taking can potentially be devastating
- Managing risks are a matter of **evaluating tradeoffs**
- How much **risk** (uncertainty) are you willing to accept for **possible higher returns?**



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



Federal State Insurance Corporation
Reinsurance Year Statistics for 2012
As of: 2/26/2013

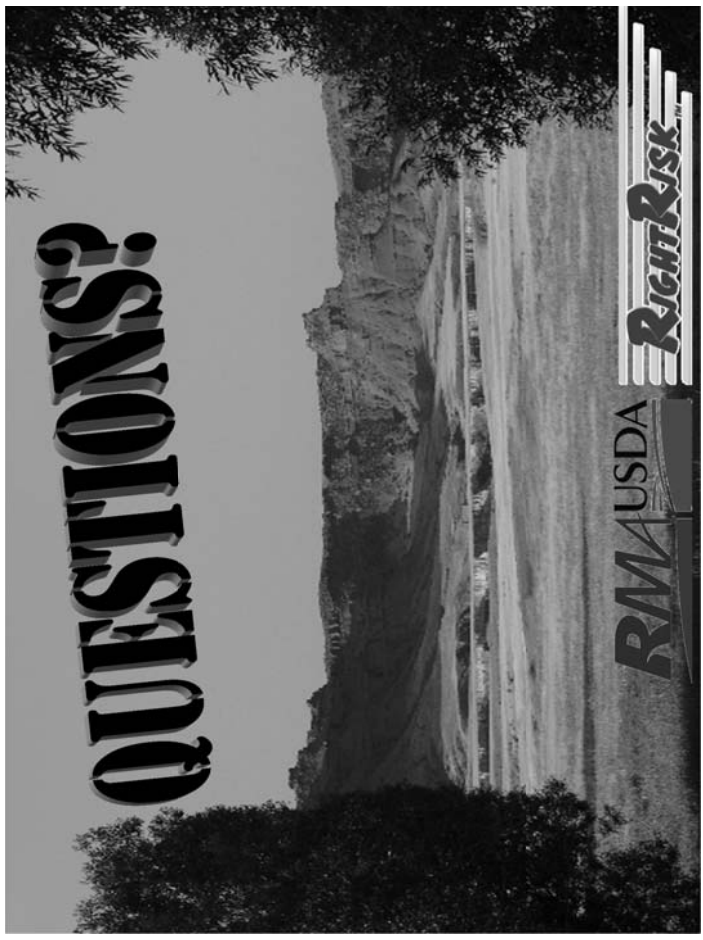
Nationwide Summary - By Reporting Organization

Commodity	Ins Plan	Pol Sold	Pol Earn Prem	Pol Indem	Pol Number of Head	Liabilities	Total Premium	Indemnity	Subsidy	Loss Ratio
FED CATTLE	LSP	390	54	28	7,427	11,169,089	376,127	120,153	48,901	32
FEDER CATTLE	LSP	4238	1174	579	177,045	184,055,335	4,444,706	4,860,428	577,817	110
CATTLE	LSP	29	2	1	65	93,210	2,835	4,484	0	158
DAIRY CATTLE	LSP	1767	900	110	40,524,158	704,863,515	18,162,929	1,266,499	8,870,732	07
LAMB	LSP	362	284	275	809,806	227,439,484	4,500,700	29,670,081	639,708	603
LAMB	LSP	36	27	21	105,720	17,471,053	657,733	982,384	0	149
SWINE	LSP	106	23	14	33,690	5,575,340	286,540	64,843	37,252	23
SWINE Total	LSP	142	50	35	139,410	23,046,393	944,273	1,047,227	37,252	111
Grand Total		6,928	2,464	1,028	41,657,911	1,150,667,006	28,851,570	37,017,872	10,174,408	124

Federal State Insurance Corporation
Reinsurance Year Statistics for 2013
As of: 2/26/2013

Nationwide Summary - By Reporting Organization

Commodity	Ins Plan	Pol Sold	Pol Earn Prem	Pol Indem	Pol Number of Head	Liabilities	Total Premium	Indemnity	Subsidy	Loss Ratio
FED CATTLE	LSP	408	36	2	5,987	9,435,480	296,415	10,638	38,537	04
FEDER CATTLE	LSP	4426	537	78	91,000	97,849,191	2,176,307	231,599	282,925	11
CATTLE	LSP	64	3	0	135	208,554	4,873	0	0	00
DAIRY CATTLE	LSP	1997	650	0	29,697,664	581,272,190	15,053,082	0	6,842,701	00
LAMB	LSP	388	239	201	491,631	93,668,647	2,344,964	12,410,780	591,808	529
SWINE	LSP	138	24	1	84,415	13,096,700	455,241	1,910	0	00
SWINE	LSP	117	9	0	15,571	1,752,816	56,870	0	7,240	00
SWINE Total	LSP	255	33	1	99,986	14,849,516	510,911	1,910	7,240	00
Grand Total		7,238	1,496	282	30,386,463	717,383,578	20,386,002	12,655,307	7,763,261	62



2012 Oregon Crop Insurance Profile

Insurance Plans Available in Oregon

Insurable Crops	Insured Acres	Total Acres	Percent Insured
Alfalfa Seed **	233	1,500	16%
Apple	2,807	6,000	47%
Barley	27,930	58,000	48%
Blueberry	2,074	7,800	27%
Cabbage	34	300	11%
Canola / Rapeseed	5,440	6,500	84%
Cherries	6,011	14,800	41%
Corn	29,231	80,000	37%
Cranberries	1,042	2,800	37%
Dry Beans	3,883	7,400	52%
Dry Peas	4,197	5,000	84%
Forage Production **	7,500	400,000	2%
Grapes	4,347	20,400	21%
Green Peas	12,013	13,600	88%
Mint	1,211	28,000	4%
Mustard	877	1,100	80%
Oats	2,454	19,000	13%
Onions	12,763	18,700	68%
Pears	9,340	16,200	58%
Potatoes	30,098	41,000	73%
Proc. Beans	1,451	13,000	11%
Proc. Sweet Corn	2,497	18,700	13%
Soybeans	0	180	0%
Sugar Beets	6,678	11,000	61%
Stonefruit *	573	2,820	20%
Wheat	704,922	885,000	80%

Dollar Liability Programs

Total Dollar Liability

Adjusted Gross Revenue Pilot	\$11,549,216
Adjusted Gross Revenue-Lite	\$25,755,051
Apiculture (Vegetation)	\$0
Livestock Gross Margin – Dairy	\$0
Livestock Risk Protection – Lamb	\$16,931,510
Livestock Risk Protection – Feeder Cattle	\$2,751,545
Nursery	\$204,153,223
Pasture/Rangeland/Forage (Vegetation)	\$5,645

Spokane Regional Office

Contact: Dave P. Paul, Director
Address: 11707 E Sprague Ave.
Suite #201
Spokane, WA 99206
Phone: (509) 228-6320
Fax: (509) 228-6321
E-Mail:
Dave.Paul@rma.usda.gov

Crop Pilot Programs

Program	County Availability
Adjusted Gross Revenue Pilot	Benton, Clackamas, Columbia, Lane, Linn, Malheur, Marion, Multnomah, Polk, Washington and Yamhill Counties
Apiculture (Vegetation)	All Counties
Cherries (Actual Revenue History)	Hood River, Marion, Polk, Umatilla, Union, Wasco and Yamhill Counties
Forage Seed (Alfalfa Type)	Malheur County
Livestock Gross Margin – Dairy	All Counties
Livestock Risk Protection – Lamb	All Counties
Livestock Risk Protection – Fed Cattle, Feeder Cattle, Swine	All Counties
Pasture/Rangeland/Forage (Vegetation)	All Counties

Western Regional Compliance Office

Contact: Susan Choy, Director
Address: 430 G Street, #4167
Davis, CA 95616-4167
Phone: (530) 792-5850
Fax: (530) 792-5865
E-Mail:
Susan.Choi@rma.usda.gov

* Fresh Apricots, Fresh Freestone Peaches, Fresh Nectarines, Plums/Prunes
** Percent insured not reflective of participation as program is only available in select counties.

Data as of January 2013



Risk Management Agency/USDA

CROP COVERAGE BY STATE / COUNTY

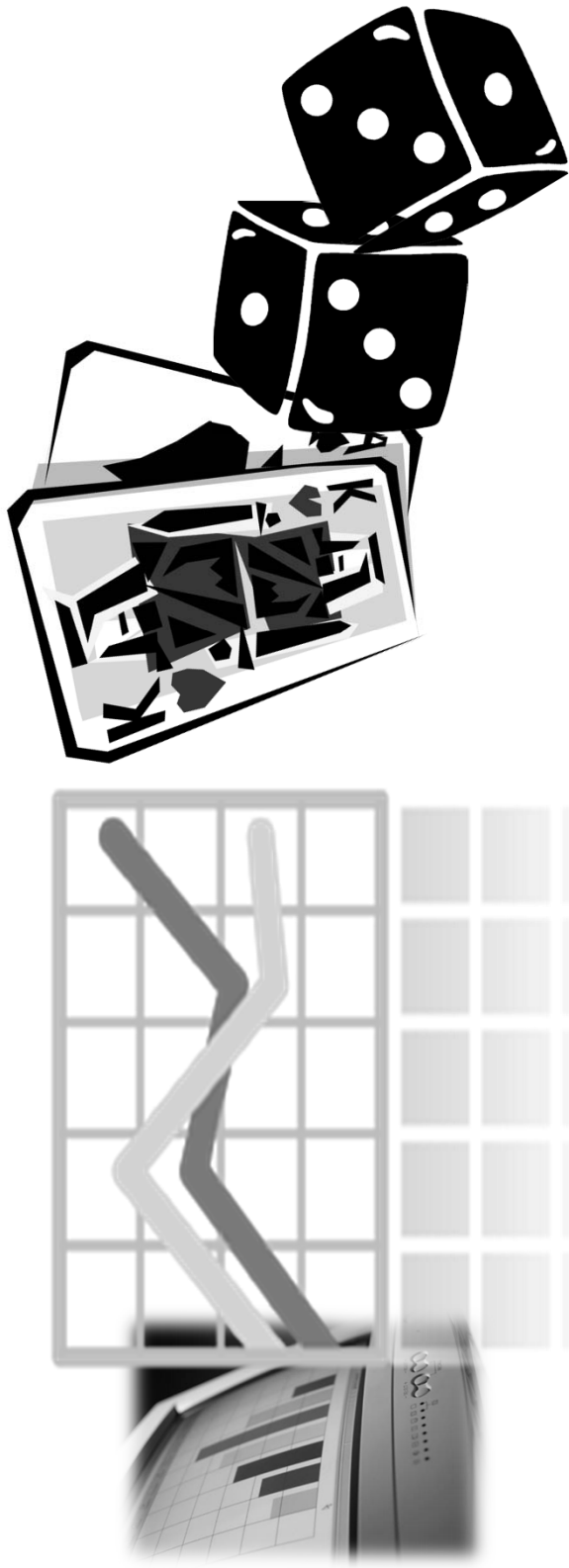
OREGON 2012		A L F A L F A	A P P L E	B A R L E Y	B L U E B E R R Y	C A B B A G E	C A N O L A	C O R N	C R A N B E R R Y	D R Y B E A N S	D R Y P E A S	F O R A G E	A P R I C O T E	N E C T A R I N E S	P E A C H E S	G R A P E S	G R E E N M I N T	M U S T A R D	N U R S E R Y	O A T S	O N I O N S	P L U M S	P E A R S	P O T A T O E S	C A N B E A N S	S O Y B E A N S	S U G A R B E E T S	S W E E T C O R N	W H E A T
001	Baker			X			X										X	X					X					X	
003	Benton			X	X		X								X	X	X	X						X				X	X
005	Clackamas		X	X	X	X	X								X			X	X					X				X	X
007	Clatsop																	X											
009	Columbia			X	X		X											X	X										X
011	Coos						X	X										X											
013	Crook			X													X	X	X					X					X
015	Curry							X										X											
017	Deschutes			X														X						X					X
019	Douglas		X	X			X								X			X	X		X								X
021	Gilliam			X			X			X								X	X										X
023	Grant		X	X														X											X
025	Harney			X														X	X										X
027	Hood River		X												X			X					X						
029	Jackson		X	X			X					X	X	X	X			X					X						X
031	Jefferson			X														X	X					X					X
033	Josephine		X	X			X								X			X					X						X
035	Klamath			X							X						X	X	X					X					X
037	Lake			X														X	X										X
039	Lane		X	X			X								X	X		X	X				X		X			X	X
041	Lincoln																	X											
043	Linn		X	X	X		X								X	X		X	X				X		X			X	X
045	Malheur	X	X	X			X		X		X						X	X	X	X				X	X		X	X	X
047	Marion		X	X	X	X	X					X	X	X	X	X		X	X	X				X	X			X	X
049	Morrow		X	X			X	X							X	X		X	X	X			X	X				X	X
051	Multnomah			X		X	X											X	X					X				X	X
053	Polk		X	X			X								X			X	X		X				X			X	X
055	Sherman			X			X											X	X										X
057	Tillimook																	X											
059	Umatilla		X	X			X	X		X	X				X	X	X	X	X	X	X	X		X	X	X		X	X
061	Union			X			X			X							X		X	X				X			X		X
063	Wallowa			X			X											X	X					X					X
065	Wasco		X	X			X					X	X	X	X			X	X				X						X
067	Washington		X	X	X		X					X	X	X	X			X	X	X	X			X	X			X	X
069	Wheeler			X														X	X										X
071	Yamhill		X	X	X		X					X	X	X	X			X	X		X				X			X	X

CY 2012 - 11/30 Filing

**AGR Pilot/AGR-Lite - Cherry ARH - Livestock Risk Protection - Livestock Gross Margin
Pasture, Rangeland and Forage - Apiculture (Honey)
Do Not Have CAT Level Coverage**

Drought Risk Management and Tools to Evaluate Your Strategy

Livestock Risk Protection (LRP)



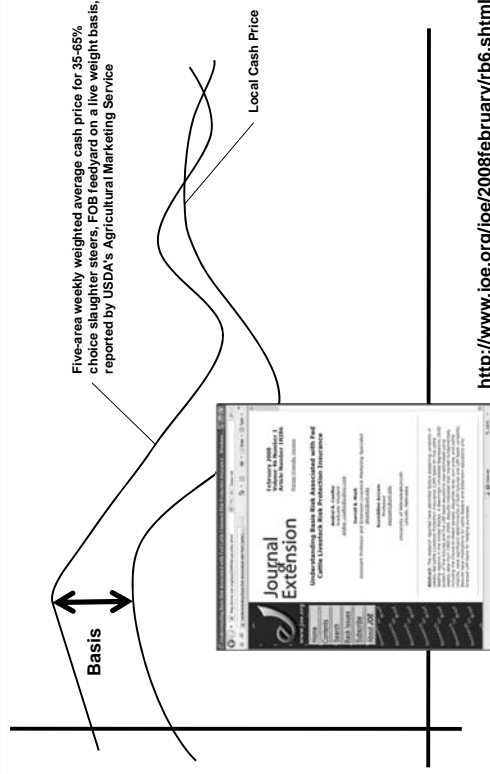
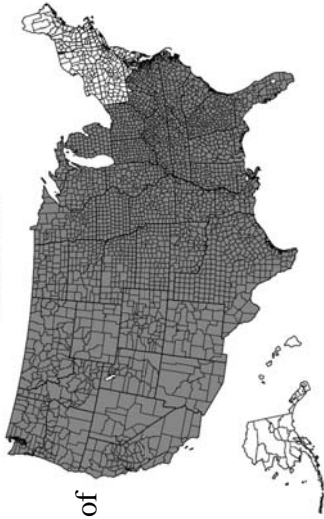
Dr. Jay Parsons – CSU Risk Management Specialist

John P. Hewlett – UW Farm/Ranch Management Specialist



- LRP for feeder cattle offers *price* protection for feeder cattle producers. It does *not* cover sickness or death of the cattle or insure against possible rising feed costs.
- Now available in all counties of Nebraska and across several other states
- Producers remain subject to *basis price risk*

Feeder Cattle (0801)
Livestock Risk Protection



<http://www.joe.org/joe/2008february/rb6.shtml>

- **Product Offered:** Protection for producer against decline in cattle prices below the established coverage price
- **Insurance Period:** Offered for 13, 17, 21, 26, 30, 34, 39, 43, 47 or 52-week periods
 - *The producer will choose a time closest to the time cattle will be marketed or time when cattle will reach the desired weight*



- **Application:** An application is required to purchase insurance coverage
- **Specific Coverage Endorsement:** A producer must file a Specific Coverage Endorsement for each group of feeder cattle to be insured. Several endorsements may be filed under one application as long as beneficial interests are the same



Livestock Insurance: LRP for Feeder Cattle
Types and Weights of Feeder Cattle Insurable

- Steer feeder cattle < 6.0 cwt for steers and bulls and steers only from 6.0 to 9.0 cwt
- Heifer feeder cattle < 6.0 cwt and heifer feeder cattle from 6.0 to 9.0 cwt
- Predominantly Brahman heifers, steers, and bulls < 6.0 cwt and predominantly Brahman heifers and steers from 6.0 cwt to 9.0 cwt
- Predominately dairy heifers, steers and bulls < 6.0 cwt and predominately dairy heifers and steers 6.0 to 9.0 cwt



Livestock Insurance: LRP for Feeder Cattle
Types and Weights of Feeder Cattle Insurable (cont)

- “Crop” year: [July 1 to June 30]
 - **Annual Policy Limits:** *The maximum number of head of feeder cattle that may be covered during a crop year is 2,000 head*
- Endorsement Limits:
 - *A limit of 1,000 head of feeder cattle may be insured under any one Specific Coverage Endorsement*



Livestock Insurance: LRP for Feeder Cattle
Coverage Prices and Levels

- Coverage Prices
 - *the prices that may be insured by the producer*
- Coverage Levels
 - *based on the chosen coverage price and range from 70 to 100% of the expected end value*
- Price Adjustment Factors
 - *account for differences between steer prices and prices of other types and weight of cattle*
 - *adjustments are applied prior to posting on the RMA website*



Livestock Insurance: LRP for Feeder Cattle
Actual and Expected End Value of Feeder Cattle

- Expected End Value
 - *This is the expected prices at the end of an insurance period for each specific type and weight of feeder cattle announced daily on the RMA website*
- Actual End Value
 - *This is the value of the cash settled CME feeder cattle index on the end date of the insurance period, adjusted by RMA for feeder cattle type and weight*
- Subsidy Level
 - *RMA provides a 13% subsidy on LRP feeder cattle*



Livestock Reports

State	County	Endorsement Length	Commodity	Type	Practice	Crop Year	Exp. End Value	Coverage Price	Coverage Level	Rate	Cost Per CWT	End Date
41 Oregon	998 All Counties	13	0001 Feeder Cattle	809 Steers Weight 1	997 No Practice Specified	2013	162,902	\$162,460	0.997300	0.031702	5.150	05/28/2013
41 Oregon	998 All Counties	13	0001 Feeder Cattle	809 Steers Weight 1	997 No Practice Specified	2013	162,902	\$160,260	0.983600	0.024532	3.931	05/28/2013
41 Oregon	998 All Counties	13	0001 Feeder Cattle	809 Steers Weight 1	997 No Practice Specified	2013	162,902	\$158,060	0.970300	0.018498	2.924	05/28/2013
41 Oregon	998 All Counties	13	0001 Feeder Cattle	809 Steers Weight 1	997 No Practice Specified	2013	162,902	\$155,860	0.956600	0.013713	2.137	05/28/2013
41 Oregon	998 All Counties	13	0001 Feeder Cattle	809 Steers Weight 1	997 No Practice Specified	2013	162,902	\$153,660	0.943300	0.009850	1.514	05/28/2013
41 Oregon	998 All Counties	13	0001 Feeder Cattle	809 Steers Weight 1	997 No Practice Specified	2013	162,902	\$149,260	0.916300	0.004960	0.740	05/28/2013
41 Oregon	998 All Counties	13	0001 Feeder Cattle	809 Steers Weight 1	997 No Practice Specified	2013	162,902	\$144,860	0.889200	0.002491	0.361	05/28/2013

★ Unsubsidized cost per cwt

Livestock Reports

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41 Oregon	998 All Counties	13	0001 Feeder Cattle	809 Steers Weight 1	997 No Practice Specified	2013	162,902	\$162,460	0.997300	0.031702	5.150	05/28/2013
41 Oregon	998 All Counties	13	0001 Feeder Cattle	809 Steers Weight 1	997 No Practice Specified	2013	162,902	\$160,260	0.983600	0.024532	3.931	05/28/2013
41 Oregon	998 All Counties	13	0001 Feeder Cattle	809 Steers Weight 1	997 No Practice Specified	2013	162,902	\$158,060	0.970300	0.018498	2.924	05/28/2013
41 Oregon	998 All Counties	13	0001 Feeder Cattle	809 Steers Weight 1	997 No Practice Specified	2013	162,902	\$155,860	0.956600	0.013713	2.137	05/28/2013
41 Oregon	998 All Counties	13	0001 Feeder Cattle	809 Steers Weight 1	997 No Practice Specified	2013	162,902	\$153,660	0.943300	0.009850	1.514	05/28/2013
41 Oregon	998 All Counties	13	0001 Feeder Cattle	809 Steers Weight 1	997 No Practice Specified	2013	162,902	\$149,260	0.916300	0.004960	0.740	05/28/2013
41 Oregon	998 All Counties	13	0001 Feeder Cattle	809 Steers Weight 1	997 No Practice Specified	2013	162,902	\$144,860	0.889200	0.002491	0.361	05/28/2013

★ Unsubsidized cost per cwt

Livestock Reports

State	County	Endorsement Length	Commodity	Type	Practice	Crop Year	Exp. End Value	Coverage Price	Coverage Level	Rate	Cost Per CWT	End Date
41 Oregon	998 All Counties	21	0001 Feeder Cattle	809 Steers Weight 1	997 No Practice Specified	2013	168,739	\$155,100	0.919200	0.010205	1.598	07/23/2013
41 Oregon	998 All Counties	21	0001 Feeder Cattle	809 Steers Weight 1	997 No Practice Specified	2013	168,739	\$150,700	0.893100	0.008577	0.991	07/23/2013
41 Oregon	998 All Counties	26	0001 Feeder Cattle	809 Steers Weight 1	997 No Practice Specified	2013	169,840	\$169,400	0.997400	0.038890	6.588	08/27/2013
41 Oregon	998 All Counties	26	0001 Feeder Cattle	809 Steers Weight 1	997 No Practice Specified	2013	169,840	\$167,200	0.984500	0.032868	5.496	08/27/2013
41 Oregon	998 All Counties	26	0001 Feeder Cattle	809 Steers Weight 1	997 No Practice Specified	2013	169,840	\$165,000	0.971500	0.027393	4.520	08/27/2013
41 Oregon	998 All Counties	26	0001 Feeder Cattle	809 Steers Weight 1	997 No Practice Specified	2013	169,840	\$162,800	0.958500	0.022738	3.701	08/27/2013
41 Oregon	998 All Counties	26	0001 Feeder Cattle	809 Steers Weight 1	997 No Practice Specified	2013	169,840	\$160,600	0.945600	0.018589	2.985	08/27/2013
41 Oregon	998 All Counties	26	0001 Feeder Cattle	809 Steers Weight 1	997 No Practice Specified	2013	169,840	\$156,200	0.919700	0.012514	1.955	08/27/2013
41 Oregon	998 All Counties	26	0001 Feeder Cattle	809 Steers Weight 1	997 No Practice Specified	2013	169,840	\$151,800	0.893600	0.009558	1.299	08/27/2013

★ Unsubsidized cost per cwt

Livestock Reports

State	County	Endorsement Length	Commodity	Type	Practice	Crop Year	Exp. End Value	Coverage Price	Coverage Level	Rate	Cost Per CWT	End Date
41 Oregon	998 All Counties	13	0001 Feeder Cattle	809 Steers Weight 1	997 No Practice Specified	2013	162,902	\$162,460	0.997300	0.031702	5.150	05/28/2013
41 Oregon	998 All Counties	13	0001 Feeder Cattle	809 Steers Weight 1	997 No Practice Specified	2013	162,902	\$160,260	0.983600	0.024532	3.931	05/28/2013
41 Oregon	998 All Counties	13	0001 Feeder Cattle	809 Steers Weight 1	997 No Practice Specified	2013	162,902	\$158,060	0.970300	0.018498	2.924	05/28/2013
41 Oregon	998 All Counties	13	0001 Feeder Cattle	809 Steers Weight 1	997 No Practice Specified	2013	162,902	\$155,860	0.956600	0.013713	2.137	05/28/2013
41 Oregon	998 All Counties	13	0001 Feeder Cattle	809 Steers Weight 1	997 No Practice Specified	2013	162,902	\$153,660	0.943300	0.009850	1.514	05/28/2013
41 Oregon	998 All Counties	13	0001 Feeder Cattle	809 Steers Weight 1	997 No Practice Specified	2013	162,902	\$149,260	0.916300	0.004960	0.740	05/28/2013
41 Oregon	998 All Counties	13	0001 Feeder Cattle	809 Steers Weight 1	997 No Practice Specified	2013	162,902	\$144,860	0.889200	0.002491	0.361	05/28/2013

★ Unsubsidized cost per cwt

Livestock Insurance:
LRP for Feeder Cattle Example

Contract Data	Value
Number of Steers	300
Expected Weight	550
Current Date	Jan. 15
Marketing Date	Oct. 15
Insurance Period	39 Weeks
Expected Ending Value	178.805
Coverage Level	0.9228
Coverage Price	165.00

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Livestock Insurance:
LRP for Feeder Cattle Example

Contract Data	Value	Source
Insured Value	\$272,250	300 hd x 5.5 cwt/hd x 165.00/cwt
Premium Rate	0.017240	RMA
Total Premium	\$4,693	272,250 x 0.017240
Subsidy Rate	13%	RMA
Subsidy Amount	\$610	4,693 x 0.13
Producer Premium	\$4,083	4,693 – 610

Producer Premium = \$4,083/(1,650 cwt) = \$2.47/cwt

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Livestock Insurance:
LRP for Feeder Cattle Example

- Suppose the CME-reported actual ending value is \$142.00/cwt. Would you receive an indemnity?

• **Indemnity calculation**

Indemnity = 300 hd x 5.5 cwt/hd x (165.00-142.00) = \$37,950

- This is independent of the actual (cash) marketing decision and outcome

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Livestock Insurance:
LRP for Feeder Cattle Example

- Suppose you actually market your steers for \$141.00/cwt. at the local auction

• **Net Revenue Calculations:**

Sales Revenue = 300 hd x 5.5 cwt/hd x 141.00 = \$232,650

• **Net Revenue = Sales + Indemnity – Producer Premium**

Net Revenue = 232,650 + 37,950 – 4,083 = \$266,517

Net Revenue per cwt. = \$266,517/(300 x 5.5) = \$161.53/cwt.

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Livestock Risk Protection

Feeder Cattle

Revised May 2009

General Background

Livestock Risk Protection (LRP)-Feeder Cattle is designed to insure against declining market prices. Cattle producers may select from a variety of coverage levels and insurance periods that match the time their feeder cattle would normally be marketed (ownership may be retained).

LRP-Feeder Cattle insurance may be purchased throughout the year from approved livestock insurance agents. Premium rates, coverage prices, and actual ending values are posted online daily.

Coverage Availability

Cattle producers submit a one-time application for LRP-Feeder Cattle coverage. After the application is accepted, specific coverage endorsements may be purchased for up to 1,000 head of feeder cattle that are expected to weigh up to 900 pounds at the end of the insurance period. The annual limit for LRP-Feeder Cattle is 2,000 head per producer for each crop year (July 1 to June 30). All insured calves and cattle must be located in a State approved for LRP-Feeder Cattle at the time insurance is purchased.

The length of insurance coverage available for each specific coverage endorsement is 13, 17, 21, 26, 30, 34, 39, 43, 47, or 52 weeks.

Coverage is available for the calves, steers, heifers, predominantly Brahman, and predominantly dairy cattle categories. Feeder cattle producers may also choose from two weight ranges: under 600 pounds and 600-900 pounds.

LRP-Feeder Cattle insurance is available to producers with feeder cattle in the following 37 States: Alabama, Arizona, Arkansas, California, Colorado, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Mexico, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, Washington, West Virginia, Wisconsin, and Wyoming.

Coverage Levels, Prices, and Rates

Cattle producers may select coverage prices ranging from 70 to 100 percent of the expected ending value. At the end of the insurance period, if the actual ending value is below the coverage price, the producer will be paid an indemnity for the difference between the coverage price and actual ending value.

The LRP-Feeder Cattle program's coverage prices, rates, actual ending values, and per hundredweight cost of insurance may be viewed on the Risk Management Agency's Web site. Actual ending values are based on weighted average prices as reported in the Chicago Mercantile Exchange Group Feeder Cattle Index. Actual ending values will be posted on Risk Management Agency's Web site at the end of the insurance period.

RMA Web Site

Daily LRP Coverage Prices, Rates, and Actual Ending Values: <http://www.rma.usda.gov/tools/livestock.html>

Premium Calculator:
<http://www.rma.usda.gov/tools/premcalc.html>

Approved livestock agents and insurance companies:
<http://www.rma.usda.gov/tools/agent.html>

Related AMS online livestock reports:
http://marketnews.usda.gov/portal/lg?paf_dm

About the Application Process

LRP-Feeder Cattle insurance must be purchased through a livestock insurance agent. An application can be filled out at any time; however, insurance does not attach until a specific coverage endorsement is purchased. Coverage will not attach unless the premium is paid on the day coverage is purchased. Multiple specific coverage endorsements may be purchased with one application. Insurance coverage starts the day a specific coverage endorsement is purchased and the purchase is approved by Risk Management Agency. There are funding limitations for all livestock programs; therefore, Risk Management Agency tracks total policy sales against available underwriting capacity using a real-time, Web-based program. Sales will cease when underwriting capacity is reached.

Contact Us

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1400 Independence Ave., SW, Stop 0801
Washington, D.C. 20250-0801
RMA Web site: <http://www.rma.usda.gov>
E-mail: rmaweb.content@rma.usda.gov

Download Copies from the Web

Visit our online publications/fact sheets page at: <http://www.rma.usda.gov/pubs/rme/>

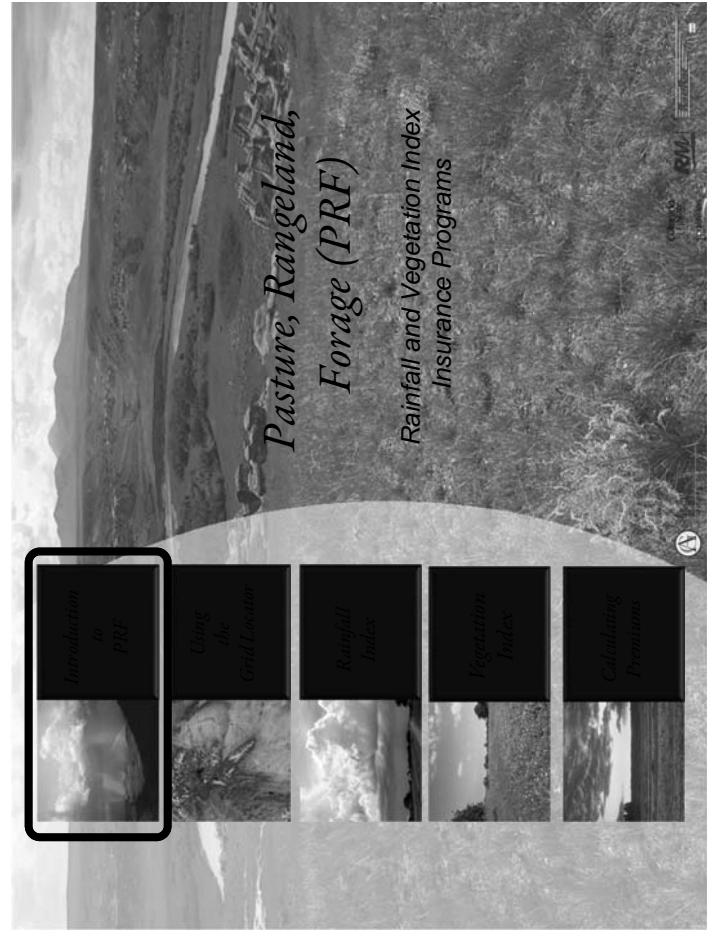
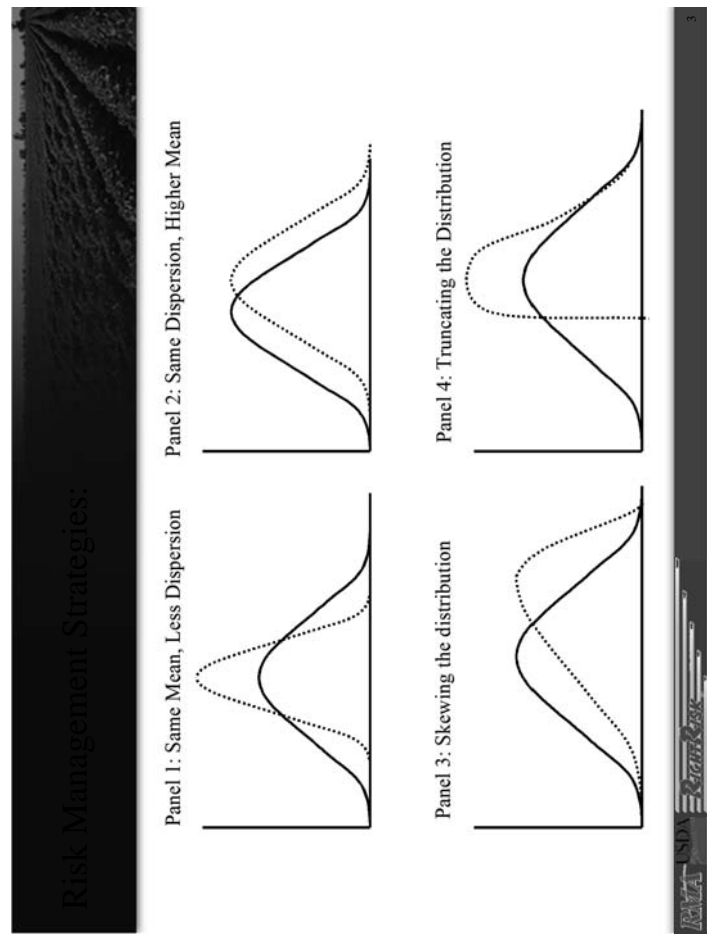
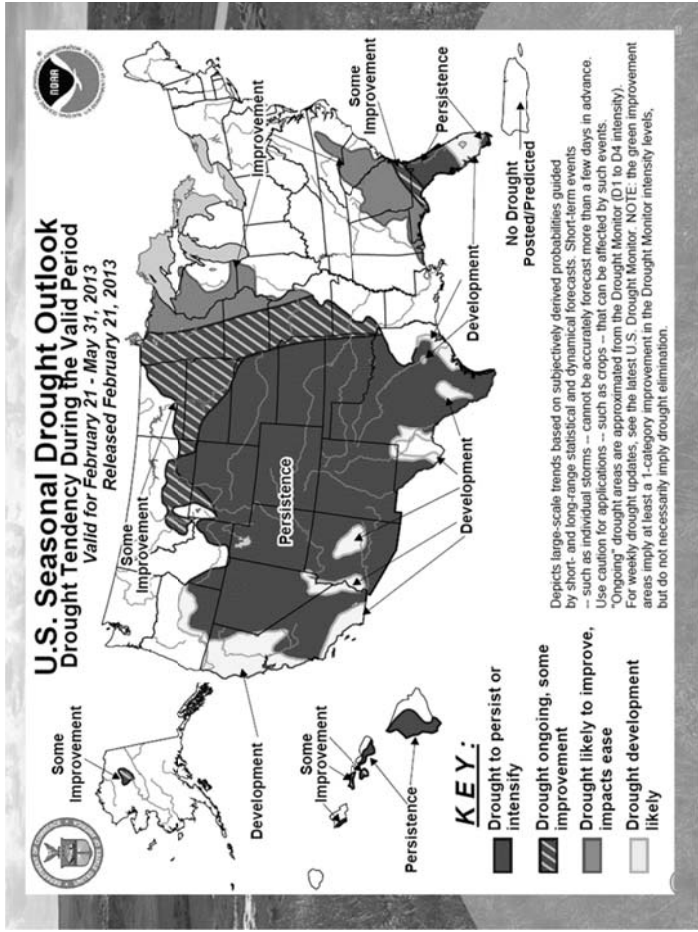
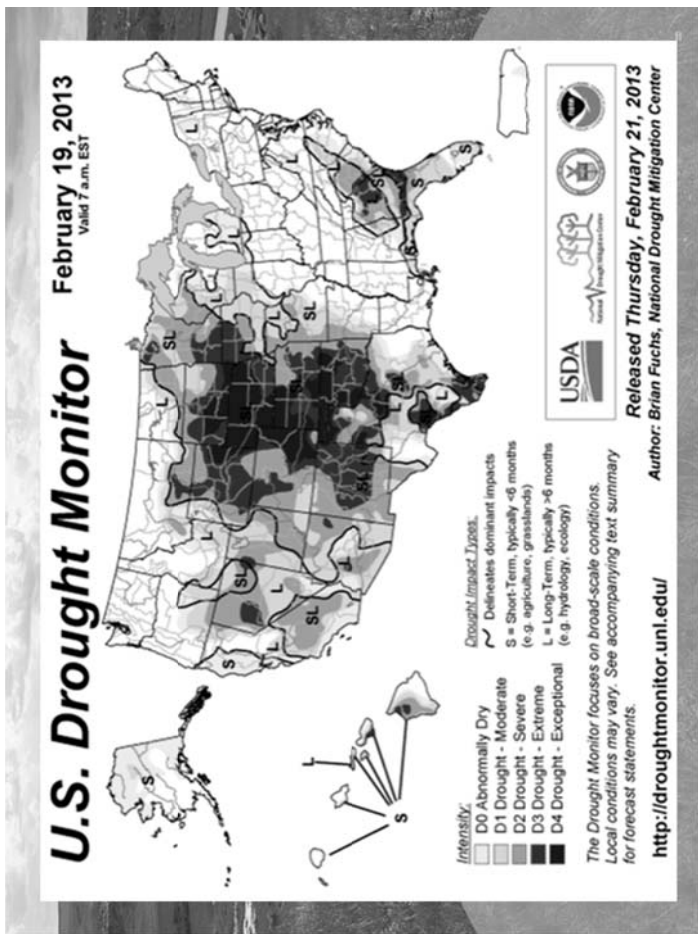
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Managing Drought Risk Using Vegetation Index – Pasture, Rangeland, Forage Insurance

John P. Hewlett – University of Wyoming
Dr. Jay Parsons – Colorado State University





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.



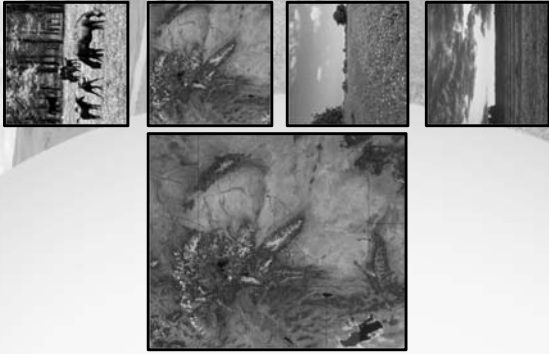
Introduction to PRF Pilot Insurance Program

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.



Introduction to PRF Pilot Insurance Program

Rainfall Index or Vegetation Index

PRF insurance helps producers manage for production losses when the final grid index falls below the trigger grid index.

There are two separate indices: the rainfall index, and the vegetation index.



Rainfall Index



Vegetation Index

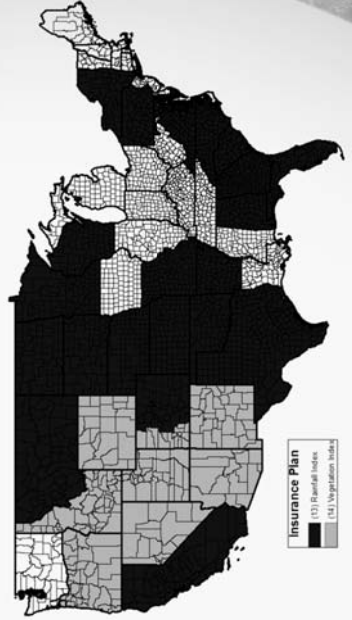
Introduction to PRF Pilot Insurance Program

PRF Program Availability for 2013

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



Introduction to PRF Pilot Insurance Program

Vegetation Index

In some states the vegetation index is available. The vegetation index utilizes the Normalized Difference Vegetation Index (NDVI) Data from U.S. Geological Survey EROS to measure the density of photosynthetic biomass on the ground. Losses are calculated based on deviation from the vegetation index for the grid during particular time intervals.

The insurance coverage is multi-peril, losses caused by natural occurrences. Coverage is based on the long-term historical average for the same area of land for the same period of time, **not actual production of individual farms or ranches.**



Introduction to PRF Pilot Insurance Program

How the Vegetation Index is Established

NDVI data is used to establish vegetation indices for each grid. One index is calculated for each three-month interval in a twelve-month period.

You select one or more 3-month period that represents your pasture, rangeland, or forage practices.

Coverage is based on losses within the grid rather than individuals producer's losses

Graph

Type: * Index Values © Estimated Indemnities

Range: Start 1989 End 2012

Intervals:

- Jan-Mar
- Feb-Apr
- Apr-Jun
- May-Jul
- Jun-Aug
- Jul-Sep
- Aug-Oct
- Sep-Nov
- Oct-Dec



Introduction to PRF Pilot Insurance Program

Index Intervals

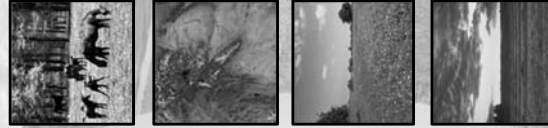
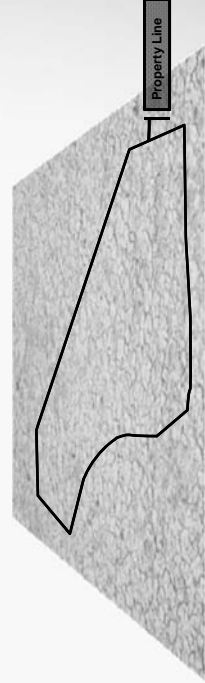
Producers must select the appropriate time frames or index intervals to apply for PRF insurance coverage. It's important to select intervals when forage and pasture production is critical for your operation, and to follow guidelines for your index, county, and grid.

April-2010							May-2010							June-2010																								
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S																		
4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12								
11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Introduction to PRF Pilot Insurance Program

Grid ID Number

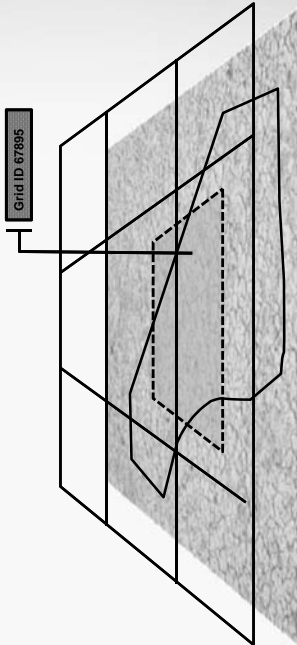
Producers must also select a reference point on the grid that best represents the location of the grazinglands or haylands they want to insure.



Introduction to PRF Pilot Insurance Program

Grid ID Number

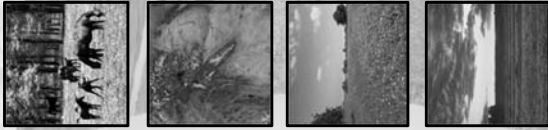
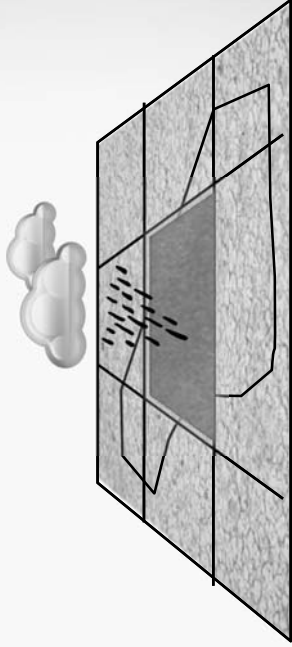
Each grid segment is identified by a grid ID. Rainfall index and vegetation index programs use different grid sizes, so the grid ID will be different depending on which plan is available.



Introduction to PRF Pilot Insurance Program

Expected Index Values

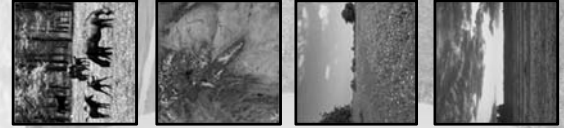
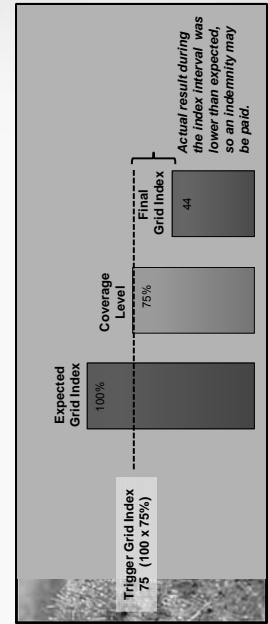
Historical data for each grid is used to determine the expected index value for either precipitation or vegetation greenness.



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.



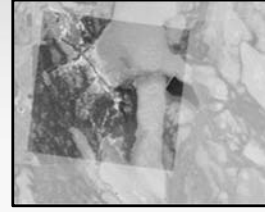
Introduction to PRF Pilot Insurance Program

Key Characteristics of PRF

Coverage is based on the experience of the entire grid area—not individual losses.

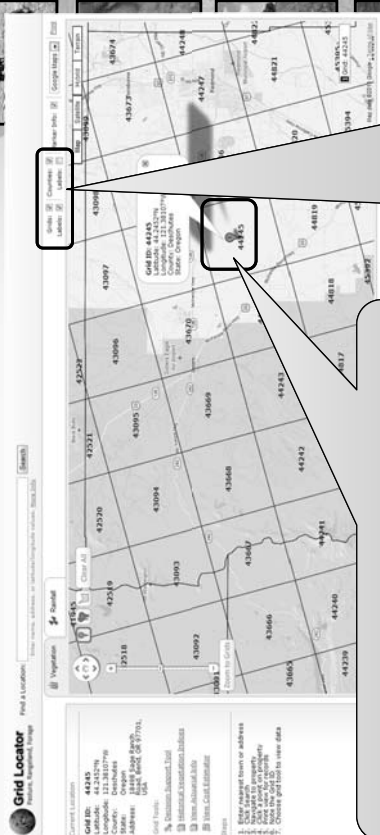
PRF does not take into consideration the exact situation of the producer. It is possible that ...

- 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

Find the Property



Navigate to the Property

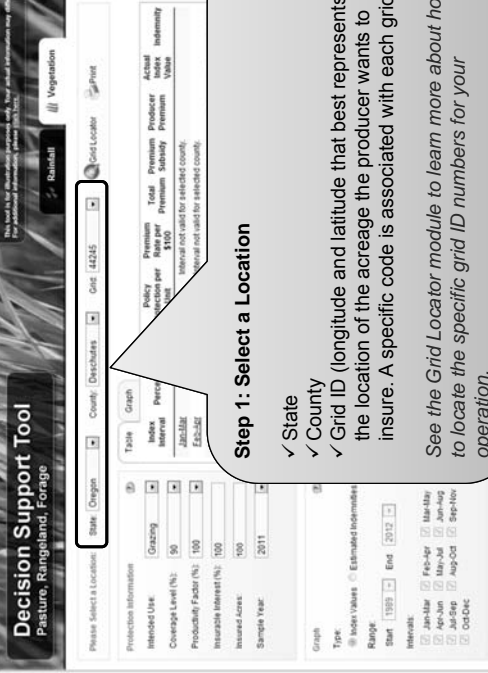
1. Place the cursor close to the location of the property and click on the map to insert a location pointer

Display Checkboxes

- To see the borders of counties and grid areas, select
- ✓ Counties (blue outlines)
 - ✓ Grids (red outlines)
 - ✓ Labels (red numbers)

Introduction to PRF Pilot Insurance Program

Using the Vegetation Index Decision Support Tool

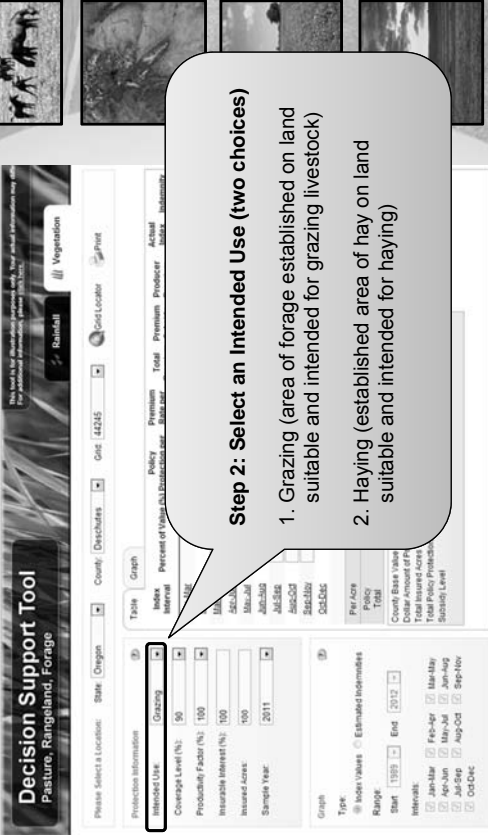


Step 1: Select a Location

- ✓ State
 - ✓ County
 - ✓ Grid ID (longitude and latitude that best represents the location of the producer wants to insure. A specific code is associated with each grid)
- See the Grid Locator module to learn more about how to locate the specific grid ID numbers for your operation.

Introduction to PRF Pilot Insurance Program

Using the Vegetation Index Decision Support Tool

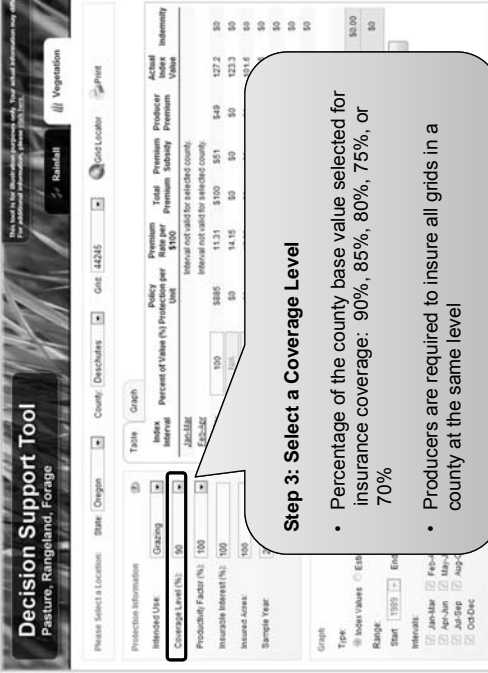


Step 2: Select an Intended Use (two choices)

1. Grazing (area of forage established on land suitable and intended for grazing livestock)
2. Haying (established area of hay on land suitable and intended for haying)

Introduction to PRF Pilot Insurance Program

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

Introduction to PRF Pilot Insurance Program

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)

Introduction to PRF Pilot Insurance Program

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%

Introduction to PRF Pilot Insurance Program

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

Introduction to PRF Pilot Insurance Program

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

Vegetation Index

Using the Vegetation Index Decision Support Tool

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Premium
2012	-	-	413	0	0	0	0	0	0	0	0	0	49
2011	-	-	0	0	0	0	0	0	0	0	0	0	49
2010	-	-	0	0	0	0	0	0	0	0	0	0	49
2009	-	-	0	0	0	0	0	0	0	0	0	0	49
2008	-	-	0	0	0	0	0	0	0	0	0	0	49
2007	-	-	0	0	0	0	0	0	0	0	0	0	49
2006	-	-	0	0	0	0	0	0	0	0	0	0	49
2005	-	-	0	0	0	0	0	0	0	0	0	0	49
2004	-	-	0	0	0	0	0	0	0	0	0	0	49
2003	-	-	463	0	0	0	0	0	0	0	0	0	49
2002	-	-	693	0	0	0	0	0	0	0	0	0	49
2001	-	-	605	0	0	0	0	0	0	0	0	0	49
2000	-	-	0	0	0	0	0	0	0	0	0	0	49
1999	-	-	0	0	0	0	0	0	0	0	0	0	49
1998	-	-	0	0	0	0	0	0	0	0	0	0	49
1997	-	-	0	0	0	0	0	0	0	0	0	0	49
1996	-	-	0	0	0	0	0	0	0	0	0	0	49
1995	-	-	63	0	0	0	0	0	0	0	0	0	49
1994	-	-	0	0	0	0	0	0	0	0	0	0	49
1993	-	-	532	0	0	0	0	0	0	0	0	0	49
1992	-	-	0	0	0	0	0	0	0	0	0	0	49
1991	-	-	407	0	0	0	0	0	0	0	0	0	49
1990	-	-	532	0	0	0	0	0	0	0	0	0	49
1989	-	-	245	0	0	0	0	0	0	0	0	0	49
1988	-	-	0	0	0	0	0	0	0	0	0	0	49
1987	-	-	0	0	0	0	0	0	0	0	0	0	49
1986	-	-	0	0	0	0	0	0	0	0	0	0	49
1985	-	-	0	0	0	0	0	0	0	0	0	0	49
1984	-	-	0	0	0	0	0	0	0	0	0	0	49
1983	-	-	0	0	0	0	0	0	0	0	0	0	49
1982	-	-	0	0	0	0	0	0	0	0	0	0	49
1981	-	-	0	0	0	0	0	0	0	0	0	0	49
1980	-	-	0	0	0	0	0	0	0	0	0	0	49
NET:													2,777
NET:													1,176

Introduction to PRF Pilot Insurance Program

Using the Vegetation Index Decision Support Tool

Decision Support Tool
Pasture, Rangeland, Forage

Please select a location: State: Oregon County: Deschutes Grid: 44245 Grid Locator Print

Protection Information
Intended Use: Hay
Coverage Level (%): 90
Probability Factor (%): 100
Insurable Interest (%): 100
Insured Acres: 2011
Sample Year: 2011

Graph
Type: Index Values Estimated Indemnities
Range: Start: 1989 End: 2012
Intervals: Jan-Mar Feb-Apr Mar-May Apr-Jun May-Jul Jun-Aug Jul-Sep Aug-Oct Sep-Nov Oct-Dec

Policy Information
Percent of Value (%) Protection per Unit: 100
Premium Rate per \$100: \$48.947
Internal not used for selected county.

Actual Index Indemnity Values

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Premium
2012	-	-	22,842.00	0	0	0	0	0	0	0	0	0	2,713
2011	-	-	0	0	0	0	0	0	0	0	0	0	2,713
2010	-	-	0	0	0	0	0	0	0	0	0	0	2,713
2009	-	-	0	0	0	0	0	0	0	0	0	0	2,713
2008	-	-	0	0	0	0	0	0	0	0	0	0	2,713
2007	-	-	0	0	0	0	0	0	0	0	0	0	2,713
2006	-	-	0	0	0	0	0	0	0	0	0	0	2,713
2005	-	-	0	0	0	0	0	0	0	0	0	0	2,713
2004	-	-	0	0	0	0	0	0	0	0	0	0	2,713
2003	-	-	25,616.00	0	0	0	0	0	0	0	0	0	2,713
2002	-	-	38,342.00	0	0	0	0	0	0	0	0	0	2,713
2001	-	-	33,447.00	0	0	0	0	0	0	0	0	0	2,713
2000	-	-	0	0	0	0	0	0	0	0	0	0	2,713
1999	-	-	0	0	0	0	0	0	0	0	0	0	2,713
1998	-	-	0	0	0	0	0	0	0	0	0	0	2,713
1997	-	-	0	0	0	0	0	0	0	0	0	0	2,713
1996	-	-	0	0	0	0	0	0	0	0	0	0	2,713
1995	-	-	0	0	0	0	0	0	0	0	0	0	2,713
1994	-	-	0	0	0	0	0	0	0	0	0	0	2,713
1993	-	-	0	0	0	0	0	0	0	0	0	0	2,713
1992	-	-	0	0	0	0	0	0	0	0	0	0	2,713
1991	-	-	0	0	0	0	0	0	0	0	0	0	2,713
1990	-	-	0	0	0	0	0	0	0	0	0	0	2,713
1989	-	-	0	0	0	0	0	0	0	0	0	0	2,713
NET:													65,112

Vegetation Index

Using the Vegetation Index Decision Support Tool

Decision Support Tool
Pasture, Rangeland, Forage

Please select a location: State: Oregon County: Deschutes Grid: 44245 Grid Locator Print

Protection Information
Intended Use: Hay
Coverage Level (%): 90
Probability Factor (%): 100
Insurable Interest (%): 100
Insured Acres: 2011
Sample Year: 2011

Graph
Type: Index Values Estimated Indemnities
Range: Start: 1989 End: 2012
Intervals: Jan-Mar Feb-Apr Mar-May Apr-Jun May-Jul Jun-Aug Jul-Sep Aug-Oct Sep-Nov Oct-Dec

Actual Index Indemnity Values

Introduction to PRF Pilot Insurance Program

Using the Vegetation Index Decision Support Tool

Decision Support Tool
Pasture, Rangeland, Forage

Please select a location: State: Oregon County: Deschutes Grid: 44245 Grid Locator Print

Protection Information
Intended Use: Hay
Coverage Level (%): 90
Probability Factor (%): 100
Insurable Interest (%): 100
Insured Acres: 2011
Sample Year: 2011

Graph
Type: Index Values Estimated Indemnities
Range: Start: 1989 End: 2012
Intervals: Jan-Mar Feb-Apr Mar-May Apr-Jun May-Jul Jun-Aug Jul-Sep Aug-Oct Sep-Nov Oct-Dec

Actual Index Indemnity Values

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Premium
2012	-	-	22,842.00	0	0	0	0	0	0	0	0	0	2,713
2011	-	-	0	0	0	0	0	0	0	0	0	0	2,713
2010	-	-	0	0	0	0	0	0	0	0	0	0	2,713
2009	-	-	0	0	0	0	0	0	0	0	0	0	2,713
2008	-	-	0	0	0	0	0	0	0	0	0	0	2,713
2007	-	-	0	0	0	0	0	0	0	0	0	0	2,713
2006	-	-	0	0	0	0	0	0	0	0	0	0	2,713
2005	-	-	0	0	0	0	0	0	0	0	0	0	2,713
2004	-	-	0	0	0	0	0	0	0	0	0	0	2,713
2003	-	-	25,616.00	0	0	0	0	0	0	0	0	0	2,713
2002	-	-	38,342.00	0	0	0	0	0	0	0	0	0	2,713
2001	-	-	33,447.00	0	0	0	0	0	0	0	0	0	2,713
2000	-	-	0	0	0	0	0	0	0	0	0	0	2,713
1999	-	-	0	0	0	0	0	0	0	0	0	0	2,713
1998	-	-	0	0	0	0	0	0	0	0	0	0	2,713
1997	-	-	0	0	0	0	0	0	0	0	0	0	2,713
1996	-	-	0	0	0	0	0	0	0	0	0	0	2,713
1995	-	-	0	0	0	0	0	0	0	0	0	0	2,713
1994	-	-	0	0	0	0	0	0	0	0	0	0	2,713
1993	-	-	0	0	0	0	0	0	0	0	0	0	2,713
1992	-	-	0	0	0	0	0	0	0	0	0	0	2,713
1991	-	-	0	0	0	0	0	0	0	0	0	0	2,713
1990	-	-	0	0	0	0	0	0	0	0	0	0	2,713
1989	-	-	0	0	0	0	0	0	0	0	0	0	2,713
NET:													65,112

Introduction to PRF Pilot Insurance Program

Finding Information about the Vegetation Index Program

Search RMA
Enter search text

Browse by Subject

- Bulletins and Handbooks
- Crop Policies and Pilots
- Federal Crop Insurance Corporation - FCIC
- Information by:
- Laws and Regulations
- Livestock Risk
- Refers Insurance

Pasture, Rangeland, Forage

The United States currently comprises about 588 million acres of pasture and rangeland and 61.5 million acres of hay land. The following insurance program: for pasture, rangeland, and forage (PRF) utilize various indexing systems to determine crop condition. Also see livestock policies and resources.

A link to the Decision Support Tool is available on the USDA RMA website, or you can go directly to the Decision Support Tool at:
<http://www.rma.usda.gov/policies/pasturerangeforage/>

Vegetation Index (VI) - is based on the U.S. Geological Survey's Earth Resources Observation and Science (EOS) normalized difference vegetation index (NDVI) data for grassland and forest types over the past 25 years. The index measures the greenness of the earth since 1989.

- Country Availability (PDF): Map | Text
- Basic Provisions (PDF)
- Policy Provisions (PDF)
- Vegetation Index (PDF)
- Grid ID Locator, Decision Support Tool, Historical Indices: XLS | PDF

Forage Production Index - is based on NASS county level hay yields data (all hay or alfalfa hay). The index reflects how much hay is produced relative to the long-term trend for the county. Coverage is available for forage production in select counties.

- Policy Provisions Handbook
- Final Payment: Yield Reports

Disaster Assistance Programs

Supplemental Revenue Assistance (SURE)

- Livestock Forage Disaster Program (LFP)
- Livestock Indemnity Program (LIP)
- Emergency Livestock Assistance Program (ELAP)



Vegetation Index

Oregon PRF

Federal Crop Insurance Corporation
Crop Year Statistics for 2012
Nationwide Summary - By State/County/Crop
As of: 2/25/2013

Crop	Ins Plan	Pol Sold	Pol Earn From Indemn	Units From Indemn	Net Acres	Liabilities	Total Premium	Subsidy	Cost Share	Share Dict	State Share	Share Dict	Intmty Loss Ratio
OREGON	8	8	0	0	0	0	177,239	0	0	0	0	0	0
ADJUSTED GROSS REVENUE	AGRT	4	28	0	0	0	32,706	0	0	0	0	0	0
ALFALFA	ALF	3	0	0	0	0	842,718	0	0	0	0	0	0
ALFALFA/BEET	ALB	0	0	0	0	0	0	0	0	0	0	0	0
BARLEY	BAR	14	69	0	21	9,300	2,927,314	156,132	0	0	0	0	435,854 1.38
BARLEY/RYE	BAR/RYE	82	104	0	12	15,384	2,853,549	280,133	0	0	0	0	364,718 1.39
RYE	RYE	2	15	0	0	0	657,007	338,771	0	0	0	0	806,697 1.23
BEANS	BEA	0	0	0	0	0	0	0	0	0	0	0	0
BEANS/PEAS	BEA/PEA	37	0	0	0	0	0	0	0	0	0	0	0
BLENDERIES	BLNDR	17	17	0	0	2,924	5,787,860	296,502	0	0	0	0	0
BUCKWHEAT	BKWHT	1	0	0	0	0	0	0	0	0	0	0	0
CANOLA	CAN	0	0	0	0	2,613	1,024,896	197,785	0	0	0	0	52,110 3.11
CANOLA/SAFOLIN	CAN/SAF	1	1	0	0	0	0	0	0	0	0	0	0
CANOLA/TM	CAN/TM	179	31	0	49	11,540	696,303	38,272	0	0	0	0	177,856 1.70
CHERRIES	CHR	85	168	0	52	6,098	21,328,291	1,331,086	791,491	0	0	0	666,824 74
CORN	COR	117	81	1	110	26,542	10,338,227	248,044	199,266	0	0	0	20,696 0.09
CORN/TM	COR/TM	132	92	3	133	29,231	12,827,863	493,935	332,281	0	0	0	34,049 0.27
CORN/TOTAL	COR/TOT	249	173	4	243	55,763	24,166,150	1,829,021	1,331,547	0	0	0	155,743 0.64
CROPPING	CROPP	4	26	1	25	3,863	1,906,080	96,789	87,311	0	0	0	9,538 0.49
CROPPING/PRODUCTION	CROPP/PRD	245	49	0	60	4,297	1,911,205	74,668	43,372	0	0	0	14,027 0.73
FRUIT	FRUIT	0	0	0	0	0	0	0	0	0	0	0	0
FRESH PRODUCTION	FRESH/PRD	4	0	0	0	0	0	0	0	0	0	0	0
GREEN PEA	GRN/PEA	1	1	0	0	0	0	0	0	0	0	0	0
GREEN PEA/SAFOLIN	GRN/PEA/SAF	313	87	0	180	4,436	70,875	3,449	2,311	0	0	0	148,027 3.33
GREEN PEA/TM	GRN/PEA/TM	4	4	0	0	12,624	4,442,105	332,280	179,049	0	0	0	32,773 1.10
MUSTARD	MUSTA	1	0	0	0	0	0	0	0	0	0	0	0
MUSTARD/TM	MUSTA/TM	1	0	0	0	0	0	0	0	0	0	0	0
OLIVE	OLV	0	0	0	0	0	0	0	0	0	0	0	0
OLIVE/TM	OLV/TM	0	0	0	0	0	0	0	0	0	0	0	0
ORANGE	ORG	0	0	0	0	0	0	0	0	0	0	0	0
ORANGE/TM	ORG/TM	0	0	0	0	0	0	0	0	0	0	0	0
POTATOES	POT	125	73	0	158	4,790	48,525,837	3,507,849	2,589,058	0	0	0	1,918 0.39
POTATOES/TM	POT/TM	3	0	0	0	30,500	48,214,415	1,827,789	1,050,659	0	0	0	308,025 1.00
POTATOES/TOTAL	POT/TOT	128	73	0	158	48,244,515	96,740,252	5,335,638	3,639,717	0	0	0	1,918 0.39
PROCESSING BEANS	PROCS/BEA	34	12	2	16	1,451	896,823	59,560	37,334	0	0	0	1,604 0.02
PROCESSING CORN	PROCS/COR	44	11	0	18	2,508	1,628,817	82,493	50,154	0	0	0	16,048 0.00
SWEET CORN	SWET/COR	1	0	0	0	0	0	0	0	0	0	0	0
WHEAT	WHT	2,552	2,687	40	5,089	97,891	45,127,311	2,688,509	1,207,427	0	0	0	6,111 0.03
WHEAT/TM	WHT/TM	6	2	0	2	18,408	3,267,163	143,242	73,287	0	0	0	1,155 0.03
WHEAT/TOTAL	WHT/TOT	2,558	2,689	42	5,091	116,306	50,394,474	3,831,751	1,280,714	0	0	0	7,266 0.01
OREGON Total		6,189	3,311	438	7,160	659	679,551	633,682,475	38,509,297	23,167,800	0	0	8,659,046 2.0
Grand Total		6,190	3,311	438	7,160	659	679,551	633,682,475	38,509,297	23,167,800	0	0	8,659,046 2.0



John P. Prescott



Pasture, Rangeland, Forage Pilot Insurance Program

November 2010

The Risk Management Agency has modified the Pasture, Rangeland, Forage Pilot Insurance Program, which uses two separate Basic Provisions; the Rainfall Index Basic Provisions and the Vegetation Index Basic Provisions. Basic provisions are the terms and conditions included in all policies under these plans. These innovative pilot programs are based on vegetation greenness and rainfall indices, and are designed to give forage and livestock producers the ability to buy insurance protection for losses of forage produced for grazing or harvested for hay.

The original Pasture, Rangeland, Forage Program was designed as a risk management tool for the 588 million acres of pastureland and the 61.5 million acres of hayland in the United States. In 2007, Pasture, Rangeland, Forage insurance was available for testing in selected States. The program has been expanded and revised for the 2009 crop year. The Risk Management Agency has replaced its Group Risk Plan Basic Provisions with the Rainfall Index and Vegetation Index Basic Provisions. The new basic provisions will be applied to all Pasture, Rangeland, Forage crop policies.

The Pasture, Rangeland, Forage Pilot Insurance Programs are only available in selected States and counties. To test each index in various climates, soils, and weather conditions, these pilot programs are available in six regions across the country: the warm and humid Southeast, the cool and humid Northeast, the Northern Great Plains, the Southern Great Plains, the semi-arid Southwest, and the intermountain region of the Northwest. You can see the States and counties where the Rainfall Index and the Vegetation Index pilot programs are available at: <http://www.rma.usda.gov/policies/pasturerangeforage/2011availabilitymap.pdf>

The [Rainfall Index](#) uses National Oceanic and Atmospheric Administration Climate Prediction Center (NOAA CPC) data and each grid is 0.25

degrees in latitude by 0.25 degrees in longitude. You must select at least two, 2-month time periods where rain is important to your operation in your area. These time periods are called index intervals. Your insurance payments will be calculated using NOAA CPC data for the grid(s) and index interval(s) you have chosen to insure. When the final grid index falls below your “trigger grid index” (coverage level multiplied by the expected grid index), you may receive a loss payment. This insurance coverage is for a single peril—lack of rain. **Coverage is based on the experience of the entire grid. It is NOT based on individual farms or ranches or specific weather stations in the general area.** (You can find more detailed information at the NOAA Web site: http://www.cpc.ncep.noaa.gov/products/outreach/research_papers/ncep_cpc_atlas/7/toc.html)

The [Vegetation Index](#) uses data from the U.S. Geological Survey Earth Resources Observation and Science data center called the *Normalized Difference Vegetation Index (NDVI)*. The NDVI is a measure of vegetation greenness and is used to estimate 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 all vegetation in a grid. In general, the healthier the plants in a given grid, the higher the NDVI value will be. With this insurance plan, you may select one or more 3-month time periods that represent your pasture, rangeland, or forage practices. These time periods are called index intervals. **Coverage is based on losses within the 4.8 x 4.8 mile grid rather than on an individual producer’s losses.** Losses for the Vegetation Index are paid based on the difference between the normal NDVI data (expected grid index) and the actual grid index experience during the index interval(s) you have chosen to insure. When the final grid index falls below your “trigger grid index” (coverage level times the expected grid index), you may receive a loss payment.

The process of developing these products included determining the value of forage for

grazing and haying for each county in the program. RMA and its partner used USDA Farm Service Agency Grassland Reserve Program prices for grazing land, USDA National Agricultural Statistics Service State hayland rates, U.S. Geological Survey land-cover estimates, and regional forage and hayland values determined by experts to establish a county base value for each location.

While developing these new insurance products, the Risk Management Agency considered public land versus private land, warm- and cool-season plants, different grazing patterns, and various forage species representing a wide range of relative feed values.

Pasture, Rangeland, Forage insurance was designed for maximum flexibility. You are not required to insure all your acres, but you cannot exceed the total number of grazing or haying acres you operate. This allows you to insure only those acres that are important to your grazing program or hay operation. By selecting a Protection Factor, you can establish a value between 60 and 150 percent of the County Base Value and match the amount of your protection to the value of forage that best represents your specific grazing or hay operation, as well as the productivity of your land.

You will be asked to make several choices when insuring your grazing or hay production, including coverage level, index intervals, protection factor, and number of acres. You should work with your crop insurance agent to view the Grid ID Locator map and index grids for your area, and assign acreage to one or more grids based on the location and use of the acreage to be insured. **The Vegetation and Rainfall indices do not measure your direct production or loss.** You are insuring a rainfall or vegetation index that is expected to estimate your production. **Please review the historical indices for your area to make sure that this product will be helpful to you.**

The Pasture, Rangeland, Forage Rainfall Index and Vegetation Index pilot programs are being tested in select counties and States. You can view a map and a list of the counties and States where each index is available at: <http://www.rma.usda.gov/policies/pasturerangeforage>.

Please visit your crop insurance agent for more information. If you do not have an agent, you can find one online using the RMA agent locator at: <http://www.rma.usda.gov/tools/agent.html> or at any USDA Service Center.

Contact Us

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Washington, DC 20250-0801

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E-mail: rma.cco@rma.usda.gov

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Drought Risk Management and Tools to Evaluate Your Strategy

Tools to Evaluate Your Strategies



John P. Hewlett

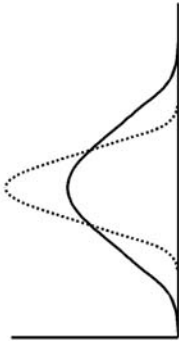
UW – Cooperative Extension Service

Dr. Jay Parsons

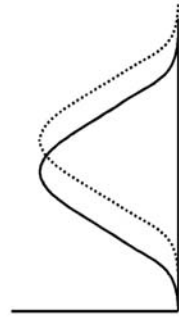
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Panel 1: Same Mean, Less Dispersion



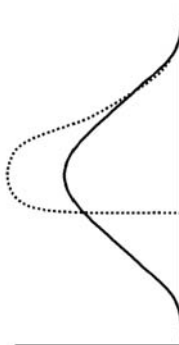
Panel 2: Same Dispersion, Higher Mean



Panel 3: Skewing the distribution



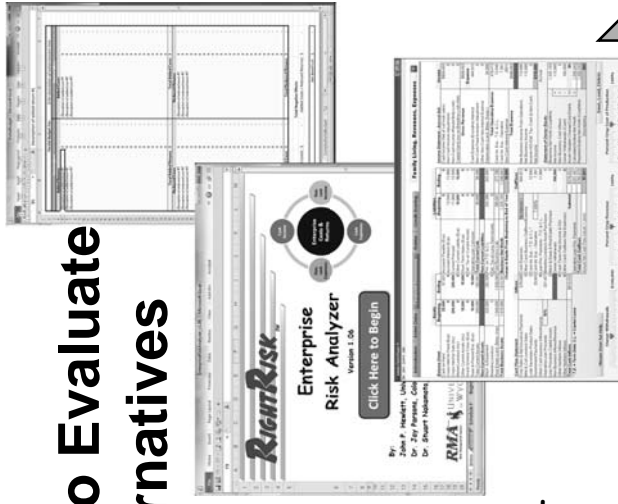
Panel 4: Truncating the Distribution



Tools to Evaluate Alternatives

- Partial Budget *relatively minor changes*
- Enterprise Budget *larger changes*
- Whole Farm Budget *substantial changes*

<http://RightRisk.org> > Tools



Partial Budget

Partial Budget Item		Enter description of modification here	
1	Added Costs		
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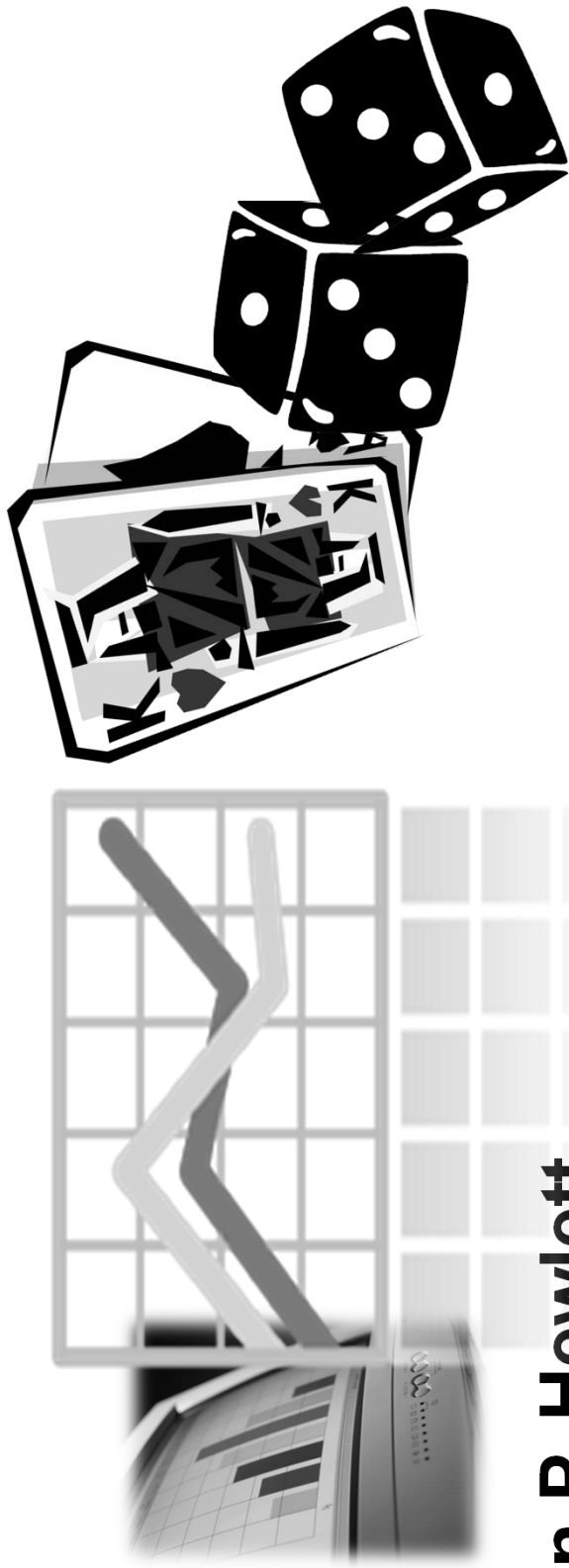
Whole Farm Budget

Introduction		Enter Data		Financial Statements		Ratios		Credit Scoring		Family Living, Revenues, Expenses																																																																																																																																					
<table border="1"> <thead> <tr> <th colspan="2">Balance Sheet</th> <th colspan="2">Assets</th> <th colspan="2">Liabilities</th> <th colspan="2">Income</th> <th colspan="2">Expenses</th> <th colspan="2">Income</th> </tr> </thead> <tbody> <tr> <td>Cash on hand</td> <td>25,000</td> <td>Cash</td> <td>100,000</td> <td>Accounts Payable (Acc)</td> <td>10,000</td> <td>Net Income</td> <td>425,844</td> <td>Other Current Liabilities (OCL)</td> <td>0</td> <td>Non-Cash Income (Risks & Losses)</td> <td>17,500</td> </tr> <tr> <td>Accounts Receivable (AR)</td> <td>0</td> <td>Accounts Payable (Acc)</td> <td>10,000</td> <td>Other Current Liabilities (OCL)</td> <td>0</td> <td>Other Non-Cash Income (Risks & Losses)</td> <td>0</td> <td>Other Current Liabilities (OCL)</td> <td>0</td> <td>Other Non-Cash Income (Risks & Losses)</td> <td>0</td> </tr> <tr> <td>Inventory</td> <td>0</td> <td>Other Current Liabilities (OCL)</td> <td>0</td> <td>Other Current Liabilities (OCL)</td> <td>0</td> <td>Other Non-Cash Income (Risks & Losses)</td> <td>0</td> <td>Other Current Liabilities (OCL)</td> <td>0</td> <td>Other Non-Cash Income (Risks & Losses)</td> <td>0</td> </tr> <tr> <td>Land</td> <td>0</td> <td>Other Current Liabilities (OCL)</td> <td>0</td> <td>Other Current Liabilities (OCL)</td> <td>0</td> <td>Other Non-Cash Income (Risks & Losses)</td> <td>0</td> <td>Other Current Liabilities (OCL)</td> <td>0</td> <td>Other Non-Cash Income (Risks & Losses)</td> <td>0</td> </tr> <tr> <td>Buildings</td> <td>0</td> <td>Other Current Liabilities (OCL)</td> <td>0</td> <td>Other Current Liabilities (OCL)</td> <td>0</td> <td>Other Non-Cash Income (Risks & Losses)</td> <td>0</td> <td>Other Current Liabilities (OCL)</td> <td>0</td> <td>Other Non-Cash Income (Risks & Losses)</td> <td>0</td> </tr> <tr> <td>Equipment</td> <td>0</td> <td>Other Current Liabilities (OCL)</td> <td>0</td> <td>Other Current Liabilities (OCL)</td> <td>0</td> <td>Other Non-Cash Income (Risks & Losses)</td> <td>0</td> <td>Other Current Liabilities (OCL)</td> <td>0</td> <td>Other Non-Cash Income (Risks & Losses)</td> <td>0</td> </tr> <tr> <td>Other Assets</td> <td>0</td> <td>Other Current Liabilities (OCL)</td> <td>0</td> <td>Other Current Liabilities (OCL)</td> <td>0</td> <td>Other Non-Cash Income (Risks & Losses)</td> <td>0</td> <td>Other Current Liabilities (OCL)</td> <td>0</td> <td>Other Non-Cash Income (Risks & Losses)</td> <td>0</td> </tr> <tr> <td>Total Assets</td> <td>25,000</td> <td>Total Liabilities</td> <td>10,000</td> <td>Total Liabilities</td> <td>10,000</td> <td>Total Income</td> <td>425,844</td> <td>Total Liabilities</td> <td>10,000</td> <td>Total Income</td> <td>425,844</td> </tr> <tr> <td>Equity</td> <td>15,000</td> <td>Equity</td> <td>15,000</td> <td>Equity</td> <td>15,000</td> <td>Equity</td> <td>15,000</td> <td>Equity</td> <td>15,000</td> <td>Equity</td> <td>15,000</td> </tr> <tr> <td>Total Equity</td> <td>15,000</td> <td>Total Equity</td> <td>15,000</td> <td>Total Equity</td> <td>15,000</td> <td>Total Equity</td> <td>15,000</td> <td>Total Equity</td> <td>15,000</td> <td>Total Equity</td> <td>15,000</td> </tr> </tbody> </table>												Balance Sheet		Assets		Liabilities		Income		Expenses		Income		Cash on hand	25,000	Cash	100,000	Accounts Payable (Acc)	10,000	Net Income	425,844	Other Current Liabilities (OCL)	0	Non-Cash Income (Risks & Losses)	17,500	Accounts Receivable (AR)	0	Accounts Payable (Acc)	10,000	Other Current Liabilities (OCL)	0	Other Non-Cash Income (Risks & Losses)	0	Other Current Liabilities (OCL)	0	Other Non-Cash Income (Risks & Losses)	0	Inventory	0	Other Current Liabilities (OCL)	0	Other Current Liabilities (OCL)	0	Other Non-Cash Income (Risks & Losses)	0	Other Current Liabilities (OCL)	0	Other Non-Cash Income (Risks & Losses)	0	Land	0	Other Current Liabilities (OCL)	0	Other Current Liabilities (OCL)	0	Other Non-Cash Income (Risks & Losses)	0	Other Current Liabilities (OCL)	0	Other Non-Cash Income (Risks & Losses)	0	Buildings	0	Other Current Liabilities (OCL)	0	Other Current Liabilities (OCL)	0	Other Non-Cash Income (Risks & Losses)	0	Other Current Liabilities (OCL)	0	Other Non-Cash Income (Risks & Losses)	0	Equipment	0	Other Current Liabilities (OCL)	0	Other Current Liabilities (OCL)	0	Other Non-Cash Income (Risks & Losses)	0	Other Current Liabilities (OCL)	0	Other Non-Cash Income (Risks & Losses)	0	Other Assets	0	Other Current Liabilities (OCL)	0	Other Current Liabilities (OCL)	0	Other Non-Cash Income (Risks & Losses)	0	Other Current Liabilities (OCL)	0	Other Non-Cash Income (Risks & Losses)	0	Total Assets	25,000	Total Liabilities	10,000	Total Liabilities	10,000	Total Income	425,844	Total Liabilities	10,000	Total Income	425,844	Equity	15,000	Equity	15,000	Equity	15,000	Equity	15,000	Equity	15,000	Equity	15,000	Total Equity	15,000	Total Equity	15,000	Total Equity	15,000	Total Equity	15,000	Total Equity	15,000	Total Equity	15,000
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Drought Risk Management and Tools to Evaluate Your Strategy

Wrap up



John P. Hewlett

UW – Cooperative Extension Service

Dr. Jay Parsons

CSU – Risk Management Specialist





<http://Oregon.eRightRisk.com>

