2007 Crop Insurance Summary
Box Elder County

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All agricultural producers face recurring risks, significant among them being production risk. Many factors contribute to production risk, including adverse weather conditions such as drought or floods, fires, insects or pests, and disease. These events can devastate a crop, significantly reducing yield and farmer revenue. Since the only way to completely avoid all production risks is to stop producing, successful farmers will seek for ways to mitigate these risks through various management techniques. One risk management tool available to crop producers is the purchase of crop insurance.

Crop insurance policies may be purchased from USDA's Farm Service Agency (NAP policies) or from a commercial firm. A list of sales representatives and policy information is found on the Utah State University Agribusiness webpage (http://extension.usu.edu). NAP policies are not available for crops that are insured by a commercial insurance company. This publication provides an evaluation of commercial policies sold in Box Elder County.

Crop insurance programs allow farmers to mitigate some of their production risk by shifting it to a third party, the crop insurer. In effect, crop insurance removes some of the risk of production loss faced by farmers. In the event of a loss, the producer would receive an indemnity payment from the insurer based upon the type and level of crop insurance coverage. It is important to understand that crop insurance is a risk management tool, not an investment. Indemnity payments are not designed to always "pay," and they are received only when something bad happens. When large losses occur, indemnity payments are made to lower the magnitude of the loss farmers incur.

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Table 1. 2007 Crop Insurance for Box Elder County

Commodity	Policies Sold	Insured Acres	Liabilities	Total Premium	Premium paid by Farmers	Indemnity	Loss Ratio
Wheat	131	34,623	3,748,453	$550,768	$215,114	$594,951	1.08
Safflower	59	5,374	208,473	$20,596	$7,288	$37,279	1.81
Corn	38	3,939	987,163	$60,292	$13,224	$2,853	0.05
Barley	32	671	50,706	$9,849	$3,915	$10,429	1.06
Forage Production	27	1,441	572,952	$36,535	$7,676	$69,325	1.90
Onions	14	811	1,414,686	$148,869	$65,006	$21,539	0.14
Oats	10	209	15,992	$1,265	$448	$0	0.00
Total	**311**	**47,068**	**6,998,425**	**$828,174**	**$312,671**	**$736,376**	**0.89**

coverage. It is important to understand that crop insurance is a risk management tool, not an investment. Indemnity payments are not designed to always "pay," and they only occur when something bad happens. When large losses occur, indemnity payments are made to lower the magnitude of the loss to farmers.

Details about past crop policies in a specific area can help producers in that area better understand the level of the risks they face. For example, if indemnity payments were relatively high for a certain crop in the past, this would suggest the risk associated with growing that crop was high. Past information can also help farmers decide if the cost of the premium is worth the lowered risk from buying a crop insurance policy. The following consists of information concerning crop insurance policies for Box Elder designed to aid producers in risk management decisions.

Table 1 provides information specific to each crop including the number of policies purchased by farmers and the total premiums paid. The federal government has numerous subsidy programs to help agricultural producers, including for the purchase of crop insurance. The amount a policy is subsidized depends on the type and level of coverage. Of particular interest is the loss ratio. It represents the value of the loss, or the indemnity payment value, compared to the total premium value. Ratios above 1.0 indicate that the value of indemnity payments made to farmers exceeded the total value of premiums paid for crop insurance. As outlined in

Table 2. Changes in Wheat Policies by Type				
Type and Coverage	Policies Sold	% change from 2006	Acres Insured	% change from 2006
APH 50% CAT	32	0%	6,553	-43%
APH 50%	13	-20%	2,029	-21%
APH 65%	44	-20%	10,344	-2%
APH 70%	5	-20%	1,181	-34%
APH 75%	4	0%	1,429	47%
CRC 50%	1	0%	2,382	33%
CRC 65%	13	-10%	2,195	-40%
CRC 70%	11	10%	4,206	32%
CRC 75%	8	30%	4,304	538%
Total	131	-9%	34,623	-6%

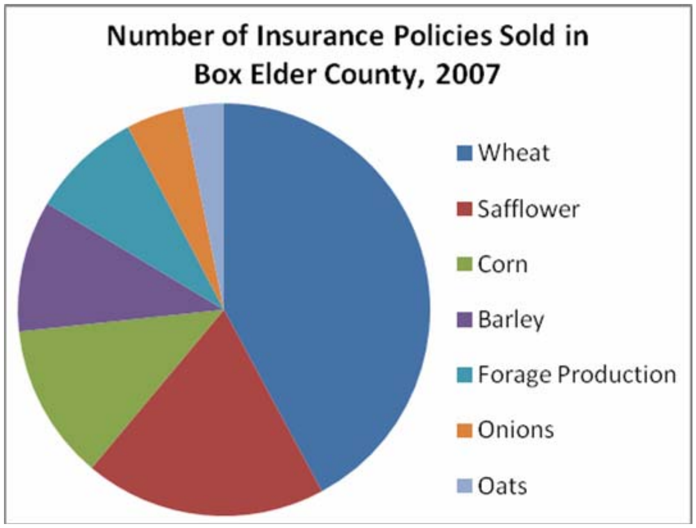


Table 1, the loss ratios for wheat, safflower, barley, and forage production were greater than 1.0 in 2007, but lower for all other commodities. Another important relationship is that between indemnity payments and the portion of premiums paid by farmers. A comparison of these two factors shows that indemnity payments were higher than premiums paid by farmers for the same four commodities, but corn, onions, and oats all had indemnity payments lower than premiums paid by farmers in 2007. The discussion below considers these and other factors relating to risk management for specific commodities grown in Box Elder County.

Wheat

Wheat is the most widely insured crop in Box Elder County, accounting for nearly 42% of total crop insurance policies sold, 67% of the total premiums and 81% of the total indemnity payments during 2007. 34,623 wheat acres were insured last year, a 6% decline in insured acres compared to 2006. Insurance policy numbers have also declined over the past few years along with the decline in insured acreage. Both APH and CRC polices were purchased for wheat in 2007. Table 2 shows the number of policies purchased and the acres insured under each policy type and coverage level, along with the percent change relative to 2006. As the table outlines, the decline in total policies sold stems mainly from declines in the purchase APH policies at the 50%, 65%, and 70% coverage levels, with some decline also at the CRC 65% level. Policy numbers at the CRC 70% and 75% levels increased, however, mitigating some of the overall decrease. Acres insured under APH policies decreased at most coverage levels, but increased under most CRC policy coverage levels, especially at the higher coverage levels. The increase in policies and acres insured at higher coverage levels led to an increase in the overall coverage level in 2007.

Given the general increase in coverage level, it is not surprising that liabilities have increased as well as premiums and indemnity payments. Figures 1 and 2 show the total premiums, premiums paid by farmers and indemnity payments for APH and CRC wheat policies, respectively, since 2000. As shown in the graphs, indemnity payments have exceeded premiums several years for APH policies and all years for CRC policies. Loss ratios have been consistently high over the past eight years, especially for CRC policies. Perhaps more important to note is that indemnity payments have exceeded total premiums paid by farmers all years for CRC policies purchased and all years but one for APH policies purchased since 2000. These facts suggest that there are high risks associated with the production of wheat in Box Elder County and that those risks can be effectively mitigated with the purchase of a crop insurance policy.

Safflower

Safflower insurance policies made up 19% of total crop policies sold, 2% of total premiums paid, and 5% of total indemnity payments in Box Elder County during 2007. The number of safflower policies declined slightly from 2006, but acres insured increased nearly 70%.

Of the safflower insurance policies purchased last year, the highest number of policies was at the 65% coverage level. The decrease in total policies sold comes from a decline at the higher coverage levels, 70% and 75%. Insured acres only decreased at the 75% coverage level, increasing at all other levels. As expected given the sharp rise in insured acreage, liabilities and premiums also increased in 2007, as well as indemnity payments as outlined in Figure 3. Indemnity payments were nearly double the premium cost last year, and over five times the amount of

Figure 1

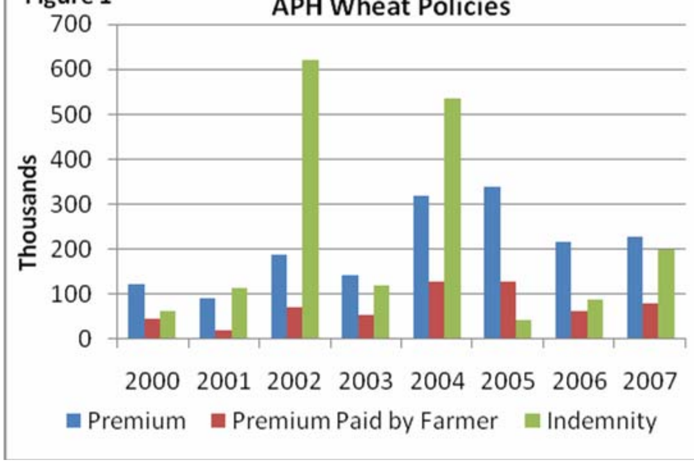


Figure 2

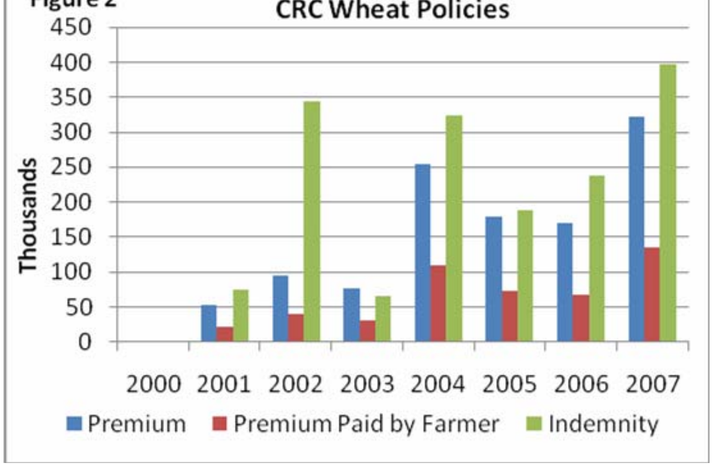
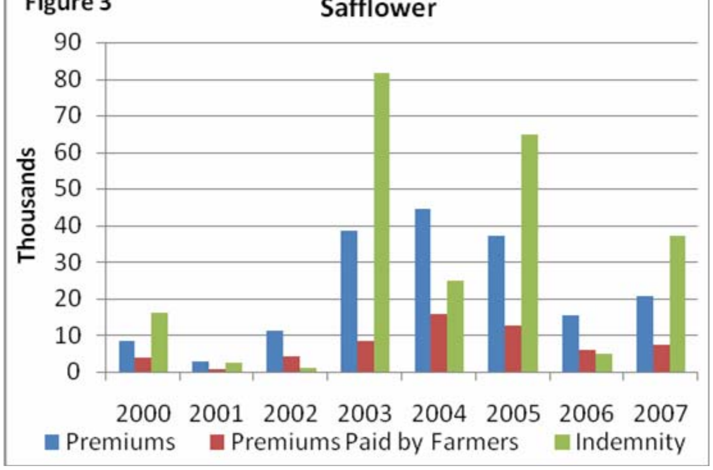


Figure 3

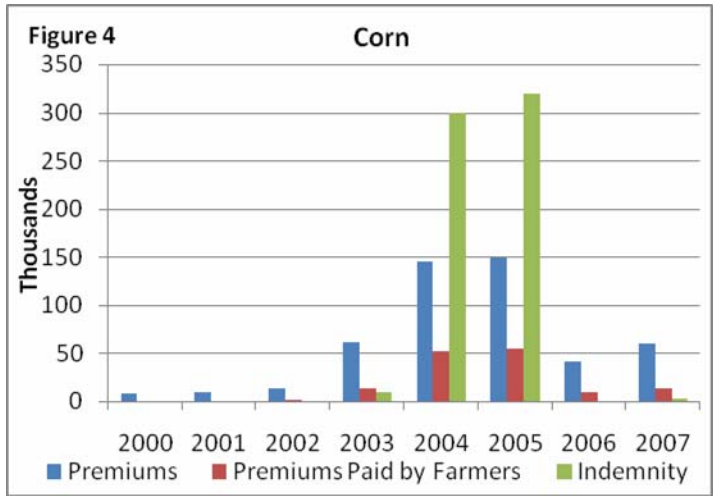


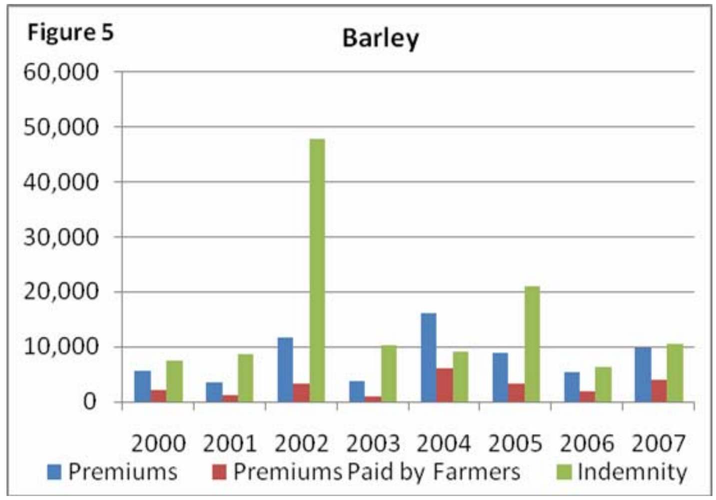
premiums paid by farmers. In general, loss ratios have been somewhat volatile, but the average loss ratio over the past eight years is 1.08. In addition, indemnity payments have exceeded the premiums paid by farmers six of the past eight years, suggesting high risk associated with the production of safflower in Box Elder County.

Corn

Corn policies accounted for 12% of total policies sold, 7% of total premiums, and 0.4% of total indemnity payments in Box Elder County during 2007. 3,939 corn acres were insured in 2007— a slight increase relative to the previous year, but a 23% decrease compared to 2005. Despite the increase in insured acreage, total policy numbers declined 10%.

Over 70% of the policies purchased last year were at the 50% coverage level and the entire decrease in policy numbers occurred at the 70% and 75% levels. Insured acres also decreased significantly at the 70% level, but increased at all other levels. Despite a lower overall coverage level in 2007, the increase in insured acres led to higher liabilities and higher premiums as shown in Figure 4. Indemnity payments also increased more than four times compared to the 2006, but were still much lower than premiums paid. As shown in Figure 4, indemnity payments have been fairly volatile over the past eight years, swinging from a low of $0 in 2001 to a high of $319,704 in 2005. While policy numbers and insured acres were higher in 2005, these factors only explain a small portion of the large increase in indemnity payments since the average indemnity per policy and per acre also increased significantly in 2005. Loss ratios have been relatively low historically with the exception of 2004 and 2005 when loss ratios were above 2.0. This volatility suggests high risks associated with the production of corn in Box Elder County.





Barley

10% of crop insurance policies sold in 2007 were for barley, accounting for 12% of total premiums, but only 1.4% of total indemnities last year. The number of barely policies purchased declined 6% from the previous year. Despite the decline in policy numbers, the number of insured acres increased 7% in 2007.

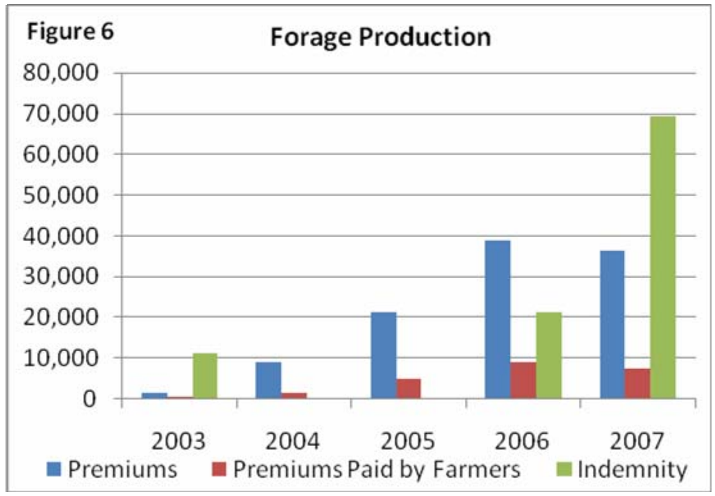
Almost half of the policies purchased for barley were at the 65% coverage level, but the entire decline in policy numbers occurred at the 65% level. Despite a decrease in policy numbers at the 65% level, acres insured more than doubled at that level and increased at all levels higher while decreasing at lower levels.

This suggests that although fewer farmers are purchasing insurance policies overall, those farmers who do purchase crop insurance policies are insuring more acres at higher coverage levels. Liabilities, premiums, and indemnity payments all increased in 2007. Figure 5 shows that indemnity payments have consistently exceeded premiums, with the exception of 2004, and have significantly exceeded premiums paid by farmers since 2000. The relatively high indemnity payment levels and the increase in insured acres indicate relatively high risk associated with barley production and mitigating that risk is important for barley farmers in Box Elder County.

Forage Production

Forage production insurance policies accounted for nearly 9% of total crop insurance policies sold, about 4% of total premiums and 9% of total indemnity payments in Box Elder County in 2007. The total number of crop insurance policies for forage production was unchanged from 2006 to 2007, but insured acres increased almost 6%.

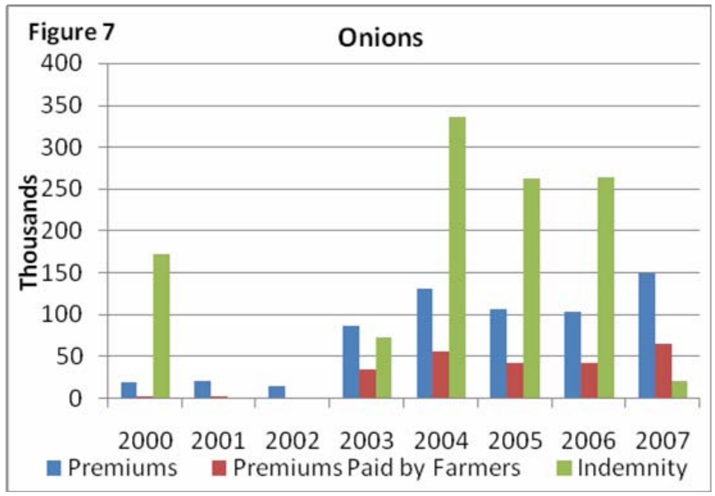
All forage production policies purchased in 2007 were APH policies at either the 50% or 75% coverage level, with no policies purchased at other coverage levels. 26 of the 27 policies purchased were at the 50% coverage level and only one was purchased at the 75% level. Despite the increase in insured acres, liabilities and premiums decreased relative to 2006. Indemnity payments, however, more than tripled relative to the previous year. Figure 6 outlines the behavior of premium and indemnity payments since the first policy was sold in 2003. The loss ratio has swung from 0.0 in 2004 and 2005 to 7.71 in 2003 and 1.90 last year. As shown in the graph, indemnity payments have been somewhat volatile, but have exceeded the premiums paid by farmers three of the five years. These high indemnity payments, especially given the low overall coverage level, indicate high risk associated with forage production in Box Elder County.



Onions

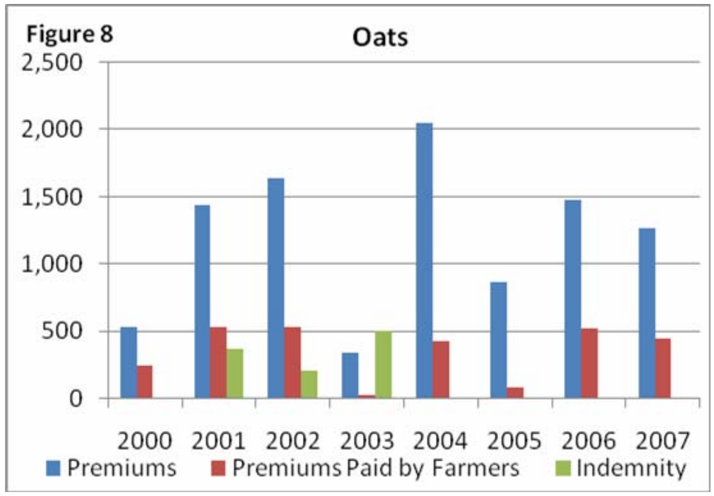
Onions insurance policies accounted for only 4.5% of total crop policies in 2007, but 18% of total premiums and 3% of total indemnities. The number of total policies purchased remained unchanged from 2006, but total insured acreage increased 5%.

Decreases in policy numbers at the 50% and 65% levels were offset by equal increases at the 75% level, resulting in a higher overall coverage level. In fact, all policies purchased in 2007 were at the 70% or 75% coverage level compared to 10 of 14 the previous year. Given this higher coverage level and the increase in acres insured, liabilities and premiums also increased. Interestingly, though, indemnity payments in 2007 were significantly lower than the previous three years, as depicted in Figure 7. Similarly, indemnity payments were relatively large in 2000 when the coverage level was quite low and the loss ratio for that year was 9.00— 3.5 times the next largest loss ratio in 2004. This suggests that relative changes in indemnity payments are not correlated to coverage level as much as changes from year to year in other production risk factors. This general volatility indicates relatively high risks associated with the production of onions in Box Elder County.



Oats

Only about 3% of crop insurance policies sold in 2007 were for oats, accounting for a mere 0.2% of total premiums and receiving no indemnity payments. The number of oats policies purchased remained unchanged from 2006 and total acres insured declined 33%. 60% of oats policies purchased in 2007 were APH policies at the 65% coverage level, with the remaining 40% at the 50% CAT coverage level. The decline in insured acreage occurred at both policy coverage levels. Liabilities and premiums also decreased in 2007, synonymous with the decline in insured acreage. No indemnity payments were made in 2007, and indemnity payments have been quite low for most of the past eight years as depicted in Figure 8. Indemnity payments have never exceeded premiums and only exceeded premiums paid by farmers one year. Indeed, the loss ratios have been quite low, below 1, for seven of the eight years, and have remained at 0 for the past four years. This suggests that for the relatively few oats acres in Box Elder County, risk of losing over half an oat crop is fairly low.



The information provided in this publication is general information for Box Elder County. It is intended to provide Box Elder County crop producers with general indicators concerning risk and the use of crop insurance to mitigate risk in the area. To better evaluate individual levels of risk and need for crop insurance, each producer should also consider personal experience with crop loss, ability to bear risk, and risk aversion.

All Utah and Box Elder County crop insurance information presented in this publication is taken or developed from Risk Management Agency crop insurance data available through their website: www.rma.usda.gov.

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