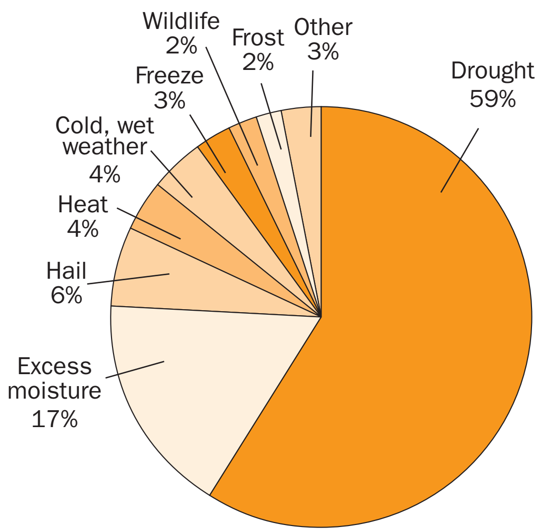
Crop Insurance for Pennsylvania Field Crops

Multi-peril crop insurance is a valuable risk management tool that allows growers to insure against losses due to adverse weather conditions, price fluctuations, and unavoidable pests and diseases. It shifts unavoidable production risks to an insurance company for the payment of a fixed amount of premium per acre. Of the $322 million paid for crop losses in Pennsylvania since 1981 ($252 million in the past ten years), 59 percent was for drought (Figure 1).

Figure 1. Why crops fail in Pennsylvania, 1981–2009. ($332 million in losses paid to farmers by crop insurance)

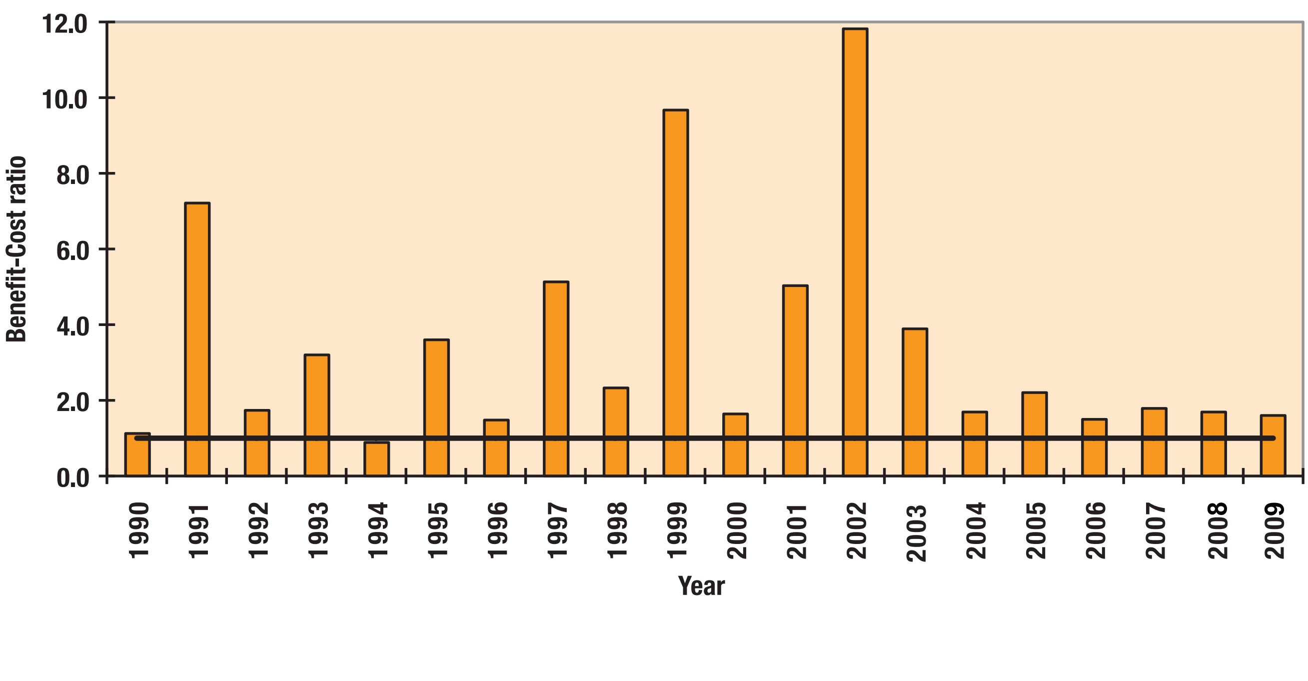


Participation in the crop insurance program in Pennsylvania has increased dramatically since the 1990's, with a large increase in acreage and coverage due to the severe conditions experienced in many parts of the Commonwealth in recent years. Over 1.1 million acres are covered by crop insurance with insurance protection of almost $400 million. The amount paid for crop losses exceeded the total amount producers paid for the protection in 19 out of the past 20 years. During that time period, Pennsylvania farmers with crop insurance received $2.73 for crop losses for every $1 they paid in premiums (Figure 2).

The federal government has decided that a crop insurance program is preferable to disaster payments. Disaster programs often involve political tradeoffs that can lead to deficit spending. It is also better to have an insurance program in place that is available nationwide and gives farmers the freedom to choose the level of coverage they need based on their own yield history. A minimum level of crop insurance, called CAT insurance, is available to all farmers regardless of size at no premium cost (all premiums are paid by the federal government). Higher levels of crop insurance (buy-up protection) are also federally subsidized, with farmers nationwide paying only 33 to 62 percent of the actual cost of the insurance (depending on the level of coverage selected). Under the 2008 Farm Bill, farmers must obtain a policy or plan of insurance for all crops (with limited exceptions) through either crop insurance or the noninsured assistance program (NAP, available through USDA-Farm Service Agency) to be eligible for future disaster assistance programs.

The Commonwealth of Pennsylvania is a strong supporter of crop insurance and has allocated over $20 million since 2000 to help farmers buy crop insurance. This money helps producers to better afford higher levels of buy up protection so that they are better protected when disasters occur.

Figure 2. Farmer benefits from crop insurance per $1 of premium.



Crop insurance policies are available for at least one commodity in every county in Pennsylvania, with a total of 27 agricultural enterprises represented across the state. Field crops covered include corn, corn silage, soybeans, wheat, barley, spring oats, grain sorghum, forage seedings, forage production (including pasture), and tobacco. Field crops account for 96 percent of all the acres covered by crop insurance in Pennsylvania and represent about 76 percent of the value of insurance protection sold on a per acre basis.

The purpose of this publication is to help you understand how crop insurance can help you manage risk by:

- introducing the types of crop insurance plans available,
- explaining how an actual production history (APH) is calculated,
- discussing what is meant by insurance units,
- illustrating how insurance premiums and loss payments are calculated,
- comparing the benefits and costs of two commonly used crop insurance products,
- identifying crop insurance options for livestock producers,
- listing important crop insurance deadlines in Pennsylvania.

Types of Crop Insurance Plans

Farmers who grow field crops have a wide range of crop insurance policies from which to choose. Yield protection coverage is available at CAT and buy-up levels for major crops in most counties. Revenue protection, dollar value, and group risk policies may also be available. Insurance protection is also available on a whole-farm basis as Adjusted Gross Revenue (AGR) insurance in 14 counties and as AGR-Lite in every county (except Philadelphia).

If crop insurance is not available for a crop in your county, coverage may still be available via a written agreement. In recent years a limited number of crop insurance policies have been purchased via written agreement for popcorn, rye, and sunflowers in Pennsylvania. If you are in a county where premium rates are not on file for a crop which is insured elsewhere in the U.S., you may be able to get protection via a written agreement, providing that you have production records for the past three years, for that or a similar crop. Contact a crop insurance agent for more information on using written agreements.

Before considering a particular kind of crop insurance policy, you should first consider how much financial risk you are willing and able to bear and what you need to protect. Some common objectives are:

- reducing year-to-year income variability,
- replacing lost feed,
- providing a minimum cash flow to cover input costs,
- securing adequate credit.

YIELD-BASED INSURANCE COVERAGE:

Yield protection insurance protects you against losses due to natural causes such as drought, excessive moisture, hail, wind, frost, and unavoidable insects and diseases. You select from 50 to 75 percent (and up to 85 percent for corn, grain sorghum, soybeans, wheat, and barley) of the amount of your average yield to insure. You can also select between 55 and 100 percent of the crop price determined annually by the USDA's Risk Management Agency (referred to as the "projected price" and based on Chicago Board of Trade (CBOT) futures prices for barley, corn, grain sorghum, soybeans, and wheat). If your production is less than the yield insured, you are paid for the loss based on the difference multiplied by the price you selected when the crop insurance was purchased. Yield protection policies are available in most Pennsylvania counties for corn, soybeans, forages (containing more than 25% alfalfa), grain sorghum, oats, barley, wheat, and tobacco.

Catastrophic crop insurance (CAT) was introduced in 1995 to replace ad hoc disaster assistance programs enacted by Congress with an insurance-based producer safety net that reflects your actual production history. Per acre insurance premiums for CAT are totally paid by the federal government. For a flat application fee of $300/crop/county, you get a crop insurance yield guarantee of 50 percent of your farm's actual production history yield, with any losses reimbursed at 55 percent of the established crop price. Compared to higher levels of coverage, CAT provides only a low level of protection against yield losses. For some diversified farmers this low level of coverage is enough to protect them against severe cash-flow shortfalls.

Group Risk Plan (GRP) policies use index values as the basis for determining a loss. GRP insurance is available for forage production in 29 counties in Pennsylvania. Under this policy, when the county yield for the insured crop, based on data from the National Agricultural Statistics Service (NASS), falls below the chosen trigger level, you receive a loss payment. Payments are not based on your individual loss records. Yield levels are available for 70 to 90 percent of the expected county yield. GRP is also available as CAT coverage. GRP protection involves less paperwork and costs less than farm-level coverage. However, your individual crop losses may not be covered if the county yield does not suffer a similar level of loss. You are best protected with this type of insurance if your crop losses typically follow the same pattern as the county.

A new GRP policy is available for pastures and hayland (PRF) for all counties in Pennsylvania. Honey bees and byproducts may also be insured under this plan via an apiculture endorsement. Unlike traditional county based GRP policies, the PRF policy is available on approximate 12 x 12 mile grids (rather than at the county level). You are insured based on your grid location rather than your county, or your farm. The PRF policy protects you against yield losses related to lack of precipitation and uses a rainfall index as a measure of crop productivity. It is based on NOAA rainfall data and NEXRAD weather radar system data. You must choose at least two, 2-month time periods to insure under the PRF rainfall index policy. You have the flexibility of insuring all or part of your acreage for all or part of the year. Loss payments are made under this insurance plan for every two-month period you insured where the rainfall index for your grid is less than the coverage level you selected.

Dollar Plan (Dollar) coverage provides protection against declining value due to damage that causes a yield shortfall. The amount of insurance is based on the typical cost of growing a crop in a specific area. A loss occurs when the annual value of the crop is less than the amount of insurance. The maximum dollar amount of insurance is stated on the actuarial document. You may select a percent of the maximum dollar amount equal to CAT (catastrophic level of coverage) or higher coverage levels. The Dollar plan is available for forage-seeding and fresh-market sweet corn in 66 counties in Pennsylvania.

REVENUE INSURANCE PLANS:

Revenue protection plans that provide protection against both yield and price risk are available for corn, grain sorghum, soybean, barley and wheat. You select a level of revenue to protect based on your price and yield expectations. Losses are paid if your revenues fall below the guarantee based on CBOT prices.

Two revenue plans are available. The first plan is called "revenue protection" which uses the higher of a projected (early-season) or harvest CBOT futures price to set your revenue guarantee. Under this insurance plan harvest versus early-season projected prices are covered for up to 100% increases and unlimited decreases. The second is called "revenue protection with harvest price exclusion" which for a reduced premium sets your revenue guarantee at the projected early-season price. The revenue that counts against your guarantee, for both revenue programs, is your production multiplied by the applicable price based on CBOT prices. Revenue protection coverage is available for corn in 66 counties, grain sorghum in 57 counties, soybean in 51 counties, barley in 54 counties and wheat in 57 counties. Revenue protection insurance is not available as CAT coverage.

Adjusted Gross Revenue (AGR and AGR-Lite) policies insure the revenue of your entire farm rather than an individual crop by guaranteeing a percentage of your average gross farm revenue. These plans use information from the past five consecutive years of your Schedule F tax forms to calculate the policy revenue guarantee. Depending on the number of commodities grown, you have the choice of three coverage levels (65, 75, and 80%) and two payment rates (75 and 90%).

- **AGR** insurance is currently only available in 14 counties in Pennsylvania. Besides limited availability, a major limitation of this product is that only farms with 35 percent livestock revenue or less are eligible for coverage. An additional requirement of AGR coverage is that if crops with individual crop insurance availability exceed 50 percent of farm revenues, crop insurance must be purchased for those crops (CAT insurance can be used to meet this requirement). The maximum policy size for AGR is $6.5 million liability (based on maximum adjusted gross revenues of $13.3 million and the 65% coverage level and 70% payment rate). The sign-up deadline for AGR is January 31.
- **AGR-Lite** represents a major improvement on the original AGR product, expanding it to provide protection for all crops and animal revenues (with no limitation on livestock income) and making it available to farmers statewide (except Philadelphia County). The application process for AGR-Lite is also streamlined in various ways and there is no requirement for the purchase of crop-specific insurance coverage (but it may be purchased at your option). The maximum policy size for AGR-Lite is $1 million liability (based on maximum adjusted gross revenues of $2,051,282 and the 65% coverage level and 70% payment rate). The sign-up deadline for first-time AGR-Lite policy holders is March 15.

Prevented Planting Coverage

Prevented planting coverage provides protection whenever an eligible crop can not be planted because of adverse weather conditions, provided it is a condition general to the geographic area. In Pennsylvania, prevented planting coverage is automatically part of all barley, corn, soybeans, grain sorghum, oats, and wheat policies (including CAT policies). Basic prevented planting coverage provides an amount of protection equal to 60 percent of the insurance guarantee; higher levels of protection at the 65 and 70 percent level are available for additional premium.

Determining Your Actual Production History

The first step in developing a crop insurance program is to establish your actual production history (APH). It is used to set the guarantees under both the yield and revenue plans of insurance. Assessing the need for crop insurance protection must be based on your farm's production potential and risk exposure. It is a good idea to establish the APH for each insurance unit with a crop insurance agent long before the sign-up date. An APH yield is needed even if you are only interested in the catastrophic (CAT) level of coverage. It will also allow you to evaluate higher levels of coverage under the yield and revenue protection insurance plans (if they are available in your county).

Establishing an APH yield requires a minimum of four years of records for each crop and land unit to be insured. Information used to prove crop yields include sale receipts, farm or commercial storage records, and feed consumption records. The records must be for continuous years, starting with the most recent year and continuing back in time. Once a missing year is reached, no yield data before that year may be used. Dropping out a yield from one year because of poor production is not allowed. It is not considered a missing year of records if the crop to be insured was not planted in a certain year. In that case, a zero acreage report is submitted and continuous records are maintained even without data for that year. This is especially important for farmers who rotate crops.

If at least four successive years of records are not available, a transitional or "T"-yield is substituted for each missing year. Each insured crop within a county has an assigned "T"-yield. It is usually based on the latest available 10-year county average yield. Farmers with no records at all are assigned 65 percent of the "T"-yield as their APH yield. Farmers with one year of records receive 80 percent of the "T"-yield for the other three years to calculate their APH yield. Farmers with two years of records receive 90 percent of the "T"-yield for the other two years. Farmers with three years of records receive 100 percent of the "T"-yield for the one remaining year. Once each year has been assigned a yield, the APH is an average of the four yields. If only a couple years of yield records exist, the APH yield may be considerably below the actual expected yield, because of the reduced "T"-yields.

New farmers or those who have never planted the crop in the county to be insured receive 100 percent of the "T"-yield for determining their APH yield. If they continue to plant the crop for four years, the "T"-yields will be replaced with the actual production each year. New farmers who have previously been closely associated with a particular farming operation, such as children taking over a family farm, who have actually been involved in the management of the farm in prior years may use the previous operator's records to establish their APH yield.

When four years of production history are available, your APH is the average of all of the yearly reported yields. Additional years of data will be averaged into your APH yield until 10 years are included. Once 10 years of yields are available, your APH becomes a moving 10-year average. When a new year of production history is added, the oldest record is dropped from the APH calculation.

When a new yield record is added to your APH history, the APH cannot decrease by more than 10 percent in any one year. The APH cannot fall to less than 70 percent of the "T"-yield for farmers with only one year of yield records, 75 percent for farmers with two to four years of yield records, and 80 percent for farmers with five or more years of yield records. This "floor" prevents one year with a severe crop failure from having a disproportionately large influence on your APH yield, especially when only a few years of yield records are available. There is also an option to substitute 60 percent of the

"T"-yield for actual yields that are less than 60 percent of the "T"-yield. There is a slightly higher premium when this option is selected.

Selecting an Insurance Unit for Crop Insurance

You have several options on how you divide your land to determine APH yields, loss payments, and premiums under crop insurance. Each parcel of land for which premiums are calculated and for which potential insurance claims are made is called an "insurance unit." Unit types include basic, optional, and enterprise units. Your farming operation may contain several insurance units. In this situation, it is possible for you to have a crop loss on one unit and receive a loss payment, while the other units on the same farm produce a record crop. As a result, you may prefer to divide your land into as many units as possible. You should check with a crop insurance agent to find out how many and what type of insurance units your crops qualify for, and how this could affect your premiums.

Basic units. You receive one basic unit for the land you own and cash rent within a county. You also receive one basic unit for each landlord or tenant with whom you crop share rent. A crop share landowner or tenant can also insure their own interest in the crop as a separate unit. Each different crop also creates a separate unit, and tracts of land in different counties must be insured as separate units. Each crop/county can have a different type of policy and level of coverage, and could receive a loss payment separate from the other units. Separate production records must be kept for each basic unit. Insuring all acres as basic units entitles producers to a 10 percent discount on their premiums.

Optional units. Basic units may often be divided into optional units when a crop is being grown under distinctly different production practices. For example, a farmer with both irrigated and non-irrigated acres of the same crop may qualify for optional units. Optional units can also allow for coverage choices in relation to yield variability in different units due to soil type or field maintenance history. Optional units may also be established by FSA farm serial number (FSN) or written agreements for situations such as section equivalents (into square mile section equivalents similar to the U.S. Rectangular Survey of the Midwest and large operations with more than 640 acres of cropland in an existing unit. Separate APH records must be reported for each optional unit, and production records must be maintained. You would not receive the 10 percent premium discount allowed for basic units.

Enterprise units. Setting up your crop insurance coverage as enterprise units is another way to receive additional premium discounts (often as much as 50%). Enterprise unit combines all of the acres of a particular crop within a county in which you have a financial interest into a single unit, regardless of whether they are owned or rented, or how many landlords are involved. They are available for revenue and yield protection plans for barley, corn, grain sorghum, soybeans and wheat. They may also be available for other crops if allowed in the special provisions of the actuarial table for your county.

In order to qualify for enterprise units, you must:

- be eligible for two or more optional units (usually two or more FSNs or by written agreement resulting in section equivalents or oversized FSNs).
- have at least two of the eligible optional units contain the lesser of 20 acres or 20 percent of the insured crop acreage of the total enterprise unit (multiple optional units may be combined to meet this requirement).
- combine all your acreage of the crop in the county into one unit.

Because enterprise units are usually larger than basic units or optional units, yields tend to be less variable and it is less likely that your average yield would be low enough to trigger a loss payment in a given year. However, this can be partially mitigated by selecting higher levels of coverage from the premium savings. Also, when widespread severe disasters occur that would trigger a loss on all optional units for the crop, loss payments would be similar for optional and enterprise unit structures.

How Crop Insurance Premiums are Calculated

Crop insurance premiums depend on your actual production history (APH yield), the coverage level you prefer, the price election you select, the unit structure and the county premium rate for the insurance plan you chose. Based on the level of coverage and the crop being insured, you pay between 33 and 62 percent of the calculated premium, with the federal government paying the balance (check with your crop insurance agent to see if additional subsidies for crop insurance may be available from the Commonwealth of Pennsylvania). If you use basic or enterprise units rather than optional units, you are eligible for additional premium discounts.

For the yield protection policy, you select a coverage level of 50, 55, 60, 65, 70, or 75 percent of your APH yield (80 and 85 percent coverage levels are also available for corn, grain sorghum, soybeans, wheat, and barley). By multiplying your APH yield by the coverage level you select, you calculate your yield guarantee, which is the trigger level for receiving a payment for yield losses from the insurance company. For the revenue protection policy, you select a coverage level of 50, 55, 60, 65, 70, 75, 80 and 85 percent of your expected revenue. By multiplying your expected revenue (APH yield times the projected futures price) by the coverage level you select, you calculate your minimum revenue guarantee, which is the trigger level for receiving a payment for revenue losses from the insurance company.

In a sense, selecting a coverage level establishes your "deductible," similar to the deductible on your automobile or homeowners insurance. For example, if a coverage level of 75 percent is selected, then you "self insure" for the first 25 percent of the loss. If the loss was more than 25 percent, your crop insurance would cover the difference. The level of coverage also affects the amount of protection that is available. Like other types of insurance, larger deductibles have lower premiums, but also leave you with more risk. You also have some choice of the established price election (percentage of the established crop price for non-revenue insurance plans), depending on the yield guarantee selected. Selecting a lower price election reduces your crop insurance premiums. In practice, however, most farmers select the 100 percent price election.

An important thing to remember about crop insurance premiums is that premium rates are directly tied to your APH yield and projected price or price elections for the crop that you are insuring. If commodity prices increase the projected price or price elections then your amount of crop insurance protection and premiums will also increase.

Some important crop insurance equations:

Yield protection policy guarantees and premiums:

Yield guarantee = APH yield x coverage level

Total premium/acre = Yield guarantee x price election x county premium rate

Subsidy amount = Total premium/acre x subsidy factor

Producer premium/acre = Total premium/acre – subsidy amount

Yield protection policy loss payments:

If actual yield is less than the yield guarantee:

Loss payment = (yield guarantee – actual production) x price election

If actual yield is equal to or greater than the yield guarantee:

Loss payment = 0

Revenue protection policy guarantees and premiums:

Revenue guarantee = APH yield x coverage level x projected price based on CBOT futures price

Total premium/acre = Revenue guarantee x county premium rate

Subsidy amount = Total premium/acre x subsidy factor

Producer premium/acre = Total premium/acre – subsidy amount

Revenue protection policy loss payments:

If you purchased a "Revenue Protection with Harvest Price Exclusion" policy, your revenue guarantee is set on the projected price prior to the sales closing date. For the "Revenue Protection" policy, the revenue guarantee is recalculated (no additional premium) if the harvest price based on CBOT futures is greater than the projected price:

Revenue guarantee = APH yield x coverage level x applicable price based on CBOT futures price

If actual revenue is less than the revenue guarantee:

Loss payment = Revenue guarantee – actual revenue

If actual revenue is equal to or greater than the revenue guarantee:

Loss payment = 0

Dollar plan guarantees and premiums:

Dollar guarantee = County maximum amount of coverage x coverage level

Total premium/acre = Dollar guarantee x county premium rate

Subsidy amount = Total premium/acre x subsidy factor

Producer premium/acre = Total premium/acre – subsidy amount

Dollar plan loss payments:

If the value of production to count is less than the Dollar guarantee:

Loss payment = Dollar guarantee – value of production to count

If the value of production to count is greater than or equal to the Dollar guarantee:

Loss payment = 0

Comparing Crop Insurance Alternatives for Field Crops

To demonstrate the different types of crop insurance coverage available, a farmer wishing to insure corn and wheat in a medium-risk county will be used as examples. The farmer wants to compare the cost and protection afforded by various levels of yield and revenue protection insurance versus having no crop insurance. The examples presented here assume hypothetical indemnity prices and reflect premiums that assume the farmer selected optional units. The farmer has APH yields of 125 bushels per acre for corn and 75 bushels per acre for wheat.

In Table 1 you can see how yield protection insurance protects cash flow for the corn crop. In this example, CAT would pay the farmer $138/A for a total crop loss. Higher levels of coverage provide even more cash-flow protection for this farmer. A minimum cash flow of $245 to $392/A is guaranteed in exchange for a producer-paid

Table 1. HOW YIELD PROTECTION INSURANCE PROTECTS YOUR CASH FLOW.
Example of premium cost and gross returns for corn grain under various yields (premiums for a medium-risk county, 125 bu. APH yield, $4.00 indemnity price based on Chicago Board of Trade, $4.00 local cash price).

	Level of crop insurance protection[1]									
Type of Coverage:	**No Insurance**	**CAT**	**Yield**	**Yield**	**Yield**	**Yield**	**Yield**	**Yield**	**Yield**	**Yield**
Yield guarantee:	0%	50%	50%	55%	60%	65%	70%	75%	80%	85%
Price guarantee:	0%	55%	100%	100%	100%	100%	100%	100%	100%	100%
Producer premium[2]:	n/a	$0.00	$4.72	$6.03	$7.06	$9.59	$11.88	$16.13	$22.92	$33.50
Administrative fee:	n/a	$300	$30	$30	$30	$30	$30	$30	$30	$30
Actual yield (bu/A)	**Gross return minus insurance cost ($/acre)**									
0	$0	$138	$245	$269	$293	$315	$338	$359	$377	$392
20	$80	$174	$245	$269	$293	$315	$338	$359	$377	$392
40	$160	$210	$245	$269	$293	$315	$338	$359	$377	$392
60	$240	$246	$245	$269	$293	$315	$338	$359	$377	$392
80	$320	$320	$315	$314	$313	$315	$338	$359	$377	$392
100	$400	$400	$395	$394	$393	$390	$388	$384	$377	$392
120	$480	$480	$475	$474	$473	$470	$468	$464	$457	$447
140	$560	$560	$555	$554	$553	$550	$548	$544	$537	$527
160	$640	$640	$635	$634	$633	$630	$628	$624	$617	$607
180	$720	$720	$715	$714	$713	$710	$708	$704	$697	$687
200	$800	$800	$795	$794	$793	$790	$788	$784	$777	$767
Yield guarantee:	0	62.5	62.5	68.75	75.0	81.25	87.5	93.75	100	106.25

Notes:

1. CAT: catastrophic crop insurance (yield protection); available at no premium cost to the producer (flat application fee of $300/crop/county).
   Yield: higher levels of yield protection insurance ("buy-up protection") available for additional premium ($30/crop application fee).
2. Premiums quoted here reflect a medium-risk county; your premiums may be higher or lower depending on the county where you farm. Producer premium takes into account only federal premium subsidies. Additional state subsidies may also be available. Optional units are used for premium calculation. Selecting basic units would reduce premiums by 10%. Selecting enterprise units would reduce premiums by about 50%.

premium of $4.72 to $33.50/A. As the level of crop insurance protection goes up, the farmer is guaranteed a less-variable cash flow.

In Table 2 you can see how revenue protection insurance protects cash flow for the corn crop. Revenue protection insurance uses futures prices to set the value of the crop and pays for revenue losses (due to yield losses and/or price declines) rather than only yield losses. By comparing the various coverage options you can see how farm cash flow is protected by using revenue protection insurance; for a total crop loss, a minimum cash flow of $244 to $372/A is guaranteed in exchange for a producer-paid premium of $6.44 to $52.67/A. In years when the harvest time futures price is less than the early price (set from futures prices in February), the effective loss payment trigger point will be higher than the selected level of coverage (example: early price $4.00/$3.75 harvest time price x 75 percent level = 80 percent loss trigger point (effective level of coverage)).

In Table 3 you can see how revenue insurance provides more protection when the futures price is higher at harvest than the projected price. In this case, the farmer pays the same premium, but takes advantage of the higher futures price when setting the revenue guarantee. For a total crop loss, a minimum cash flow of $259 to $399/A is guaranteed in exchange for the same premiums. Choosing revenue protection with the harvest price exclusion eliminates this feature for the farmer, so the information from Table 2 still applies in this situation.

In Table 4 a comparison of the cost and guarantees for yield and revenue protection insurance for wheat is illustrated. Like for corn, coverage can be obtained for wheat at the CAT level. In this example, a total crop loss this would assure the farmer of a minimum cash flow of 37.5 bushels valued at 55% of $5.25 or $108/A. Higher levels of yield protection provide a minimum cash flow of $196 to $325/A is guaranteed in exchange for a producer-paid premium of $1.03 to $10.08/A. Under revenue protection, a minimum cash flow of $195 to $314/A is guaranteed in exchange for a producer-paid premium of $1.85 to $21.06/A.

Under either the yield or revenue protection plans, the farmer is guaranteed a less-variable cash flow as the level of crop insurance protection goes up. The important distinction to remember is that yield protection only provides protection against yield losses while revenue protection provides protection against both yield losses and price declines. Revenue insurance also provides more protection when futures price are higher at harvest than the projected price (unless the less expensive revenue protection with harvest price exclusion was purchased). When harvest price is higher, the higher futures price is used when the farmer's revenue guarantee is determined, but the premium is locked in using the lower projected price.

The only advantage of having no crop insurance is saving the premium cost (but you also lose a tax deduction). Elimination of this cost would have a minor positive impact on your cash flow during good years and a potentially disastrous impact on your cash flow in a poor year. Choosing a crop insurance plan and level of coverage is a personal business decision. Not everyone feels the same about production risk and everyone has different financial resources. One way to choose would be to determine how much cash-flow protection you need and pick a coverage level and price election combination that accomplishes your goal.

Table 2. HOW REVENUE PROTECTION INSURANCE PROTECTS YOUR CASH FLOW WHEN THE PROJECTED PRICE IS HIGHEST. Example of premium cost and gross returns for corn grain under various yields (premiums for a medium-risk county, 125 bu. APH yield, $4.00 projected price > $3.75 harvest price based on Chicago Board of Trade, and $4.00 local cash price).

	Level of crop insurance protection[1]								
Type of Coverage	**No Insurance**	**Revenue**	**Revenue**	**Revenue**	**Revenue**	**Revenue**	**Revenue**	**Revenue**	**Revenue**
Coverage level:	0%	50%	55%	60%	65%	70%	75%	80%	85%
Producer premium[2]:	n/a	$6.44	$8.40	$10.05	$13.92	$17.59	$24.35	$35.33	$52.67
Administrative fee:	n/a	$30	$30	$30	$30	$30	$30	$30	$30
Actual yield (bu/A)	Gross return minus insurance cost ($/acre)								
0	$0	$244	$267	$290	$311	$332	$351	$365	$372
20	$80	$244	$267	$290	$311	$332	$351	$365	$372
40	$160	$244	$267	$290	$311	$332	$351	$365	$372
60	$240	$244	$267	$290	$311	$332	$351	$365	$372
80	$320	$314	$312	$310	$311	$332	$351	$365	$372
100	$400	$394	$392	$390	$386	$382	$376	$365	$372
120	$480	$474	$472	$470	$466	$462	$456	$445	$427
140	$560	$554	$552	$550	$546	$542	$536	$525	$507
160	$640	$634	$632	$630	$626	$622	$616	$605	$587
180	$720	$714	$712	$710	$706	$702	$696	$685	$667
200	$800	$794	$792	$790	$786	$782	$776	$765	$747
Revenue guarantee:	$0	$250	$275	$300	$325	$350	$375	$400	$425

Notes:

1. Revenue: revenue protection insurance ($30/crop application fee).
2. Premiums quoted here reflect a medium-risk county; your premiums may be higher or lower depending on the county where you farm. Producer premium takes into account only federal premium subsidies. Additional state subsidies may also be available. Optional units are used for premium calculation. Selecting basic units would reduce premiums by 10%. Selecting enterprise units would reduce premiums by about 50%.

Table 3. HOW REVENUE PROTECTION INSURANCE PROTECTS YOUR CASH FLOW WHEN THE HARVEST PRICE IS HIGHEST.
Example of premium cost and gross returns for corn grain under various yields (premiums for a medium-risk county, 125 bu. APH yield, $4.00 projected price < $4.25 harvest price based on Chicago Board of Trade, and $4.50 local cash price).

	Level of crop insurance protection[1]								
Type of Coverage	**No Insurance**	**Revenue**	**Revenue**	**Revenue**	**Revenue**	**Revenue**	**Revenue**	**Revenue**	**Revenue**
Coverage level:	0%	50%	55%	60%	65%	70%	75%	80%	85%
Producer premium[2]:	n/a	$6.44	$8.40	$10.05	$13.92	$17.59	$24.35	$35.33	$52.67
Administrative fee:	n/a	$30	$30	$30	$30	$30	$30	$30	$30
Actual yield (bu/A)	**Gross return minus insurance cost ($/acre)**								
0	$0	$259	$284	$309	$331	$354	$374	$390	$399
20	$90	$259	$284	$309	$331	$354	$374	$390	$399
40	$180	$259	$284	$309	$331	$354	$374	$390	$399
60	$270	$264	$284	$309	$331	$354	$374	$390	$399
80	$360	$354	$352	$350	$346	$354	$374	$390	$399
100	$450	$444	$442	$440	$436	$432	$426	$415	$399
120	$540	$534	$532	$530	$526	$522	$516	$505	$487
140	$630	$624	$622	$620	$616	$612	$606	$595	$577
160	$720	$714	$712	$710	$706	$702	$696	$685	$667
180	$810	$804	$802	$800	$796	$792	$786	$775	$757
200	$900	$894	$892	$890	$886	$882	$876	$865	$847
Revenue guarantee:	$0	$266	$292	$319	$345	$372	$398	$425	$452

Notes:

1. Revenue: revenue protection insurance ($30/crop application fee).
2. Premiums quoted here reflect a medium-risk county; your premiums may be higher or lower depending on the county where you farm. Producer premium takes into account only federal premium subsidies. Additional state subsidies may also be available. Optional units are used for premium calculation. Selecting basic units would reduce premiums by 10%. Selecting enterprise units would reduce premiums by about 50%.
3. This example does not apply to Revenue Protection with Harvest Price Exclusion; see Table 2.

Table 4. HOW CROP INSURANCE PROTECTS WHEAT CASH FLOW.
Impact of coverage level on premium cost and minimum cash flow for wheat (premiums for a medium-risk county, 75 bu. APH yield, $5.25 projected price based on Chicago Board of Trade).

		Yield Protection			Revenue Protection	
Coverage Option	**Administrative Fee**	**Producer Premium/A[1]**	**Yield Guarantee**	**Minimum Cash Flow**	**Producer Premium/A[1]**	**Minimum Cash Flow[2]**
CAT	$300	$0.00	37.5	$108	n/a	n/a
50	$30	$1.03	37.5	$196	$1.85	$195
55	$30	$1.50	41.25	$215	$2.70	$214
60	$30	$1.93	45.0	$234	$3.49	$233
65	$30	$2.74	48.75	$253	$5.04	$251
70	$30	$3.53	52.5	$272	$6.60	$269
75	$30	$4.87	56.25	$290	$9.37	$286
80	$30	$6.95	56.25	$308	$13.85	$301
85	$30	$10.08	56.25	$325	$21.06	$314

Notes:

1. Premiums quoted here reflect a medium-risk county; your premiums may be higher or lower depending on the county where you farm. Producer premium takes into account only federal premium subsidies. Additional state subsidies may also be available. Optional units are used for premium calculation. Selecting basic units would reduce premiums by 10%. Selecting enterprise units would reduce premiums by about 50%.
2. Revenue guarantee based on projected price minus premium cost. If harvest price based on CBOT futures is higher that the projected price, then the revenue guarantee will also be increased (unless you choose Revenue Protection with Harvest Price Exclusion).

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Crop Insurance for Livestock Producers

Crop insurance products have also been developed for farmers who produce forages for on-farm use. Yield protection coverage is available for corn silage and forage production (alfalfa and alfalfa mixtures). Forage production (including pure grass hay stands) can also be insured under GRP and forage seedlings (containing at least 50 percent approved legumes) are insured under the Dollar plan. Hay and pasture acreage can also be insured under the PRF rainfall Index program.

Corn silage and forage producers who want yield protection coverage will need to develop an APH yield and keep accurate farm management records on total acres and production (except for GRP plans). Because of the numerous ways forages can be harvested and stored, and depending on when they are fed, field visits by a representative of your crop insurance company are often required to verify production. Field visits are required if production cannot be measured after harvest (i.e., storage of high-moisture corn or silage in airtight storage structures). Records that can help establish APH yields for forages include acreage data, field harvest records, livestock feeding records (including grazing data), silo measurements, inventory records, and sales receipts. If you anticipate a loss, contact your crop insurance agent immediately to file notice of damage, and ask for instructions on how to proceed. It may be necessary for an adjuster to make pre-harvest field inspection or to leave unharvested sample areas for later inspection.

Producers may harvest grain type corn insured under the revenue or yield protection plans, insured as grain, for silage. The producer may elect to insure corn for silage with a tonnage guarantee (optional for grain type corn, mandatory for silage type corn that does not produce ears). Under the yield protection plan, on the acreage-reporting date you must indicate which acreage you choose to insure as silage and which acreage you choose to insure as grain. The insurance provider must be notified before you harvest any acreage in a manner other than as originally reported for coverage (for example, it was reported as grain, but will be harvested for silage, or it was reported as silage, but will harvested for grain). If there is a production loss, appraisals will be made according to how you reported the acreage for coverage (grain or silage). If you reported acreage as silage and the crop has a low grain content due to insurable causes, an pre-harvest appraisal should be requested as you may be eligible for quality adjustment (less than 4.5 bu./ton). Although most counties have crop insurance for grain sorghum, only those hybrids planted for harvest as grain are covered. Dual-purpose varieties that can be harvested for either grain or silage are not insurable.

Yield protection policies for forages are available in all 66 counties, but only for alfalfa and alfalfa mixtures. Premiums are based on the amount of alfalfa in the field. One set of rates applies to pure stands of alfalfa or a stand of alfalfa and grass in which 60 percent or more of ground cover is alfalfa, while the other applies to mixed stands of alfalfa and grass in which alfalfa makes up more than 25 percent but less than 60 percent of the ground cover. Stands with less than 25 percent alfalfa are not insurable. Forage production policies have a minimum requirement for an adequate stand based on the number of living plants per square foot after the year of establishment. For pure alfalfa stands an adequate stand is 9.0 alfalfa plants per square foot the first year; 6.0 plants the second year; and 4.5 plants the third and later years. For an alfalfa/grass mixture an adequate stand is defined as 6.0 alfalfa plants per square foot the first year; 4.0 plants the second year; and 3.0 the third and later years.

County-based GRP forage production policies are available for 29 counties and can be purchased by farmers producing any hay crop (not just alfalfa or alfalfa-mixtures). Group risk coverage is based on the average yield of the entire county rather than on your actual yields. Coverage at the CAT level or 70 to 90 percent of the expected county yield can be purchased for significantly less than yield protection insurance. GRP coverage works best if your yields closely track county yields or if you do not wish to or cannot furnish individual yield records.

The new grid-based rainfall index pasture and hay forage (PRF) group-risk policy that is available throughout Pennsylvania may be a good choice for insuring your hay crops and pastures. Advantages of this coverage include flexibility of when to insure during the year and how much to insure (you are not required to insure all your acreage). They also allow you to adjust coverage to better match the value of your crop and the productive capacity of your land.

Forage seeding policies are available in all 66 counties and provide a dollar amount of insurance. This coverage is available for both fall-seeded and spring-seeded fields. To be insurable, at least 50 percent of the seed mixture use must be alfalfa, clover, Birdsfoot trefoil (or any locally recognized and approved legume species) by weight. Another restriction is that acreage covered by a forage seeding policy can not be grazed during the insurance period.

There are also new products available to help dairy and lamb producers manage their market risk. The livestock gross margin (LGM) for dairy insurance is designed to protect you from unexpected declines in your income over feed costs (IOFC; the market value of your milk minus feed costs). It uses adjusted futures prices to determine the difference between expected gross margin (insurance guarantee) and your actual gross margin. You can purchase LGM dairy insurance monthly and have the option to buy protection which provides a safety net of minimum IOFC for from 1 to 10 months into the future. The insurance guarantee is met by either income from the market place and/or an insurance indemnity. The monthly enrollment period is the last business Friday and Saturday in the month (the third week in November and December). The livestock risk protection (LRP) for lamb policy is designed to protect against unexpected declines in market prices. LRP-Lamb policy can be purchased weekly and the length of insurance can be set for 13, 26, or 39 weeks.

How Can I Find a Crop Insurance Agent?

- Ask your neighbors for their recommendations. Other farmers are one of the best sources of information on where to find a knowledgeable crop insurance agent.
- Check with the insurance agency where you purchase other types of insurance. Often you can obtain crop insurance through an agent you already use for your farm, automobile, liability, fire, health, or life insurance needs. Many insurance agencies have agents who specialize in crop insurance.
- Check with businesses or organizations you use for farm business management services. Your banker, cooperative, or a farm organization you belong to may be able to recommend insurance agencies who handle crop insurance.
- Use the USDA Risk Management Agency's web site (http://www.rma.usda.gov/) to locate an agent in your area. This can be done by clicking on the "Agent/Company Locator" under "Quick Links" on the RMA home page.

Federal Disaster Assistance Programs

The federal government has other programs designed to help you manage your risk. Two important programs that could impact your farm are the noninsured disaster assistance program (NAP) and supplemental revenue assistance payments (also known as SURE; it is the new crop disaster assistance program authorized under the 2008 Farm Bill).

Noninsured Disaster Assistance Program (NAP). The Noninsured Crop Disaster Assistance Program (NAP) provides benefits to producers of commercial agricultural products for which multi-peril crop insurance coverage is not available. NAP is designed to reduce financial losses when natural disasters cause catastrophic reduction in production. NAP provides coverage that is very similar to that provided by CAT policies available through crop insurance agents. NAP coverage is available through your local USDA Farm Service Agency office. To purchase NAP coverage you pay a fee of $250 per crop per county (with fees capped at $750 per producer per county, but not to exceed a total of $1,875 for producers growing crops in multiple counties). Sign up deadlines for NAP vary by crop; contact your local FSA office for more information.

Supplemental Revenue Assistance Payments (SURE).
Some farmers have not purchased crop insurance coverage because they self-insure with other risk management tools. Many producers have not taken advantage of the minimal levels of protection provided by CAT or NAP coverage because they feel that if a catastrophic event occurs, the U.S. government will offer them disaster assistance. However, recent changes under the 2008 Farm Bill require participation in these programs in order to maintain eligibility for disaster assistance.

The 2008 Farm Bill created a crop permanent disaster assistance program to replace the "ad hoc" crop disaster programs (CDP) of past years. This new program is known as Supplemental Revenue Assistance Payments (SURE). It is a revenue based program that uses a formula to compare the expected revenue to actual revenue for the entire farming operation.

In order to be eligible for the SURE program, you are required to purchase crop insurance or NAP coverage for all crops on your farm (although there are limited exceptions to this rule). For SURE program purposes, a farm refers to all acreage in all counties that is planted or intended to be planted with crops, including all hay crops (with the exception of forage crops intended for grazing). You must also obtain coverage for other crops for which crop insurance or NAP is available, including nursery, honey, aquaculture, and floriculture. Your SURE guarantee is a percentage of your crop insurance and/or NAP guarantee. If you purchase higher levels of crop insurance both your crop insurance and SURE guarantees will be higher. Purchasing crop insurance at the 75 percent coverage level instead of CAT will increase your guarantees for both programs by approximately 2.5 times. Exceptions apply to the requirement to purchase crop insurance or NAP coverage if you are a socially disadvantaged or limited resource farmer; check with your local FSA office for more information.

Congress envisioned that if a serious regional disaster was declared by USDA, a farmer would be covered by a combination of crop insurance and SURE. When you buy higher levels of crop insurance, your SURE guarantee also increases. Unlike crop insurance, however, payments under SURE should not be expected until more than a year after the loss occurs. This is due, in part, because SURE revenue calculations are based on final national average market price data. FSA will issue SURE payments once all eligibility forms are approved, SURE program determinations are made, and national average market prices have been obtained.

Important Crop Insurance Dates

Deadlines for sales closing, final planting date, acreage reporting, billing. and contract changes for Pennsylvania crop insurance products are listed in Table 5. As a crop insurance user you should be aware of several important dates for filing information and reporting losses:

Enrollment and policy change date (sales closing date)—last day to apply for coverage or make changes to the policy; the sign up deadline.

Early planting date—acreage planted before this date is not eligible for replanting payments.

Final planting date—last day to plant with full coverage. Late planting may be insurable at reduced coverage for some crops.

Acreage reporting date—last day to report the acreage planted. If not reported, insurance may not be in effect.

Date to file notice of crop damage—within 72 hours of initial discovery of damage (but not later than 15 days after the end of the insurance period for each insurance unit). There may be additional requirements by crop. An adjuster must have the opportunity to inspect the crop before it is destroyed or put to another use.

Payment due date—last day to pay the premium without being charged interest.

Cancellation date—last day to request cancellation of policy for the next year (same date as sales closing date).

Production reporting date—last day to report production for Actual Production History (APH).

Debt termination date—date insurance company will terminate policy for nonpayment.

Billing date—date crop insurance premiums are billed. Crop insurance premiums may be deferred until 30 days after the billing date without interest charges.

End of insurance period—the date when your crop insurance coverage ends. Any notices of crop damage must be filed within 15 days of the end of the insurance period.

Table 5. Important deadlines for crop insurance in Pennsylvania.

Insurance Plan	Type of Insurance[1]	Sales Closing	Final Planting[2]	Acreage Reporting	Billing Date[3]	End of Insurance Period
AGR	whole farm revenue	1/31	–	–	12/1	–
AGR-Lite	whole farm revenue	3/15 (first time) 1/31 (renewals)	–	–	12/1	–
Apiculture (rainfall index)	GRP-PRF	9/30	–	11/15	7/1	12/31
Barley (winter)	Yield, Revenue	9/30	10/10 or 10/20	11/15	7/1	8/31
Barley (spring)	Yield, Revenue	3/15	5/10	5/31	10/1	7/31
Corn	Yield, Revenue	3/15	6/10	7/15	10/1	10/20 (silage) 12/10 (grain)
Dairy	LGM	monthly	–	–	at sign up	–
Forage seeding (fall)	Dollar	7/31	8/31	9/15	7/1	10/15
Forage seeding (spring)	Dollar	3/15	5/10	6/1	7/1	5/21
Forage production	GRP	11/30	–	5/15	7/1	–
Forage production	Yield	9/30	–	11/15	7/1	10/15
Grain sorghum	Yield, Revenue	3/15	6/20	7/15	10/1	12/10
Oats (spring)	Yield	3/15	5/10	5/31	10/1	10/31
Pasture and hay (rainfall index)	GRP-PRF	9/30	7/1 (previous year)	11/15	7/1	12/31
Soybeans	Yield, Revenue	3/15	6/10 or 6/20	7/15	10/1	12/10
Tobacco (Maryland type and cigar filler)	Yield	3/15	6/30	7/15	1/1	5/5 (following year)
Wheat	Yield, Revenue	9/30	10/20 or 10/31	11/15	7/1	8/31

Notes:

1. Yield—yield protection insurance, with loss payment based on deviation from APH yield. Premiums vary by county and with APH yield.

   Revenue— revenue protection insurance plans (including with and without harvest price exclusion), with gross revenue guarantee based on CBOT prices.

   Dollar—dollar plan, loss payment based on value of the crop relative to the dollar amount of insurance.

   GRP—group risk plan. For forage production, loss payments are based on relative county yield level and grower selected yield trigger. For PRF index policies, loss payments are based on a rainfall index based on NOAA data. The farmer chooses the coverage level (which is also the loss trigger), protection factor, and when the insurance protection is in force.

   LGM—livestock gross margin, loss payments based on difference between expected gross margin and the actual gross margin.

2. Final planting date varies throughout the state. Final planting dates for northern counties will be around 7–10 days earlier. Some crops also have initial planting dates. This date indicates the earliest a crop may be planted and still remain eligible for replanting coverage, if such coverage is available for the crop.

3. Crop insurance is billed October 1 for spring-seeded crops and July 1 for fall-seeded crops. Whole farm revenue policies (AGR and AGR-Lite) are billed on December 1. Payment for any losses will be reduced by the amount of the crop insurance premium due

Crop Insurance availability in Pennsylvania, by county.

	AGR	AGR-Lite	apiculture	apple	barley	bean (proc.)	cabbage	corn	dairy	forage prod	forage prod. (GRP)	forage seeding	grain sorghum	grape	green pea	lamb	nursery	oats	pasture, rangeland & forage	peach	pear	potato	soybean	sweet corn (fresh)	sweet corn (processing)	tobacco (type 32 & 41)	tomato (fresh)	tomato (processing)	wheat
Adams		x	x	x	x	x		x	x	x	x	x	x			x	x	x	x	x	x		x	x					x
Allegheny		x	x	x	x			x	x	x		x				x	x	x	x					x					x
Armstrong		x	x		x			x	x	x	x	x	x			x	x	x	x				x	x					x
Beaver		x	x	x	x			x	x	x		x	x			x	x	x	x	x			x	x					x
Bedford		x	x	x	x			x	x	x	x	x	x			x	x	x	x	x			x	x					x
Berks	x	x	x	x	x			x	x	x	x	x	x		x	x	x	x	x	x			x	x					x
Blair		x	x	x	x			x	x	x		x	x			x	x	x	x	x			x	x	x				x
Bradford		x	x	x	x			x	x	x	x	x	x			x	x	x	x	x				x					x
Bucks		x	x	x	x			x	x	x		x	x			x	x	x	x	x			x	x					x
Butler		x	x	x	x			x	x	x	x	x				x	x	x	x				x	x					x
Cambria		x	x	x	x			x	x	x		x	x			x	x	x	x			x	x	x					x
Cameron		x	x					x	x	x		x				x	x	x	x					x					
Carbon	x	x	x	x	x			x	x	x		x	x			x	x	x	x	x			x	x					x
Centre		x	x	x	x	x		x	x	x	x	x	x		x	x	x	x	x				x	x	x			x	x
Chester		x	x	x	x			x	x	x	x	x				x	x	x	x	x			x	x		x			x
Clarion		x	x	x	x			x	x	x	x	x	x			x	x	x	x			x	x	x					x
Clearfield		x	x	x	x			x	x	x		x	x			x	x	x	x					x					x
Clinton		x	x		x	x		x	x	x		x	x			x	x	x	x				x	x	x			x	x
Columbia	x	x	x	x	x	x		x	x	x		x	x			x	x	x	x	x		x	x	x	x			x	x
Crawford	x	x	x		x			x	x	x	x	x	x			x	x	x	x			x	x	x					x
Cumberland		x	x	x	x			x	x	x	x	x	x			x	x	x	x	x			x	x					x
Dauphin		x	x	x	x			x	x	x		x	x		x	x	x	x	x	x		x	x	x	x			x	x
Delaware		x	x		x			x	x	x		x				x	x	x	x				x	x					
Elk		x	x		x			x	x	x		x				x	x	x	x					x					
Erie	x	x	x	x	x	x		x	x	x	x	x	x	x		x	x	x	x	x		x	x	x			x	x	x
Fayette	x	x	x	x	x			x	x	x	x	x	x			x	x	x	x				x	x					x
Forest		x	x					x	x	x		x				x	x	x	x					x					
Franklin		x	x	x	x			x	x	x	x	x	x			x	x	x	x	x			x	x				x	x
Fulton		x	x		x			x	x	x		x	x			x	x	x	x				x	x					x
Greene		x	x					x	x	x	x	x	x			x	x	x	x					x					x
Huntingdon		x	x		x	x		x	x	x	x	x	x			x	x	x	x				x	x				x	x
Indiana		x	x	x	x			x	x	x	x	x	x			x	x	x	x	x			x	x				x	x
Jefferson		x	x		x			x	x	x	x	x				x	x	x	x				x	x					x
Juniata		x	x	x	x			x	x	x		x	x			x	x	x	x	x			x	x					x
Lackawanna	x	x	x					x	x	x		x	x			x	x	x	x					x			x	x	x
Lancaster	x	x	x	x	x	x		x	x	x	x	x	x		x	x	x	x	x	x		x	x	x		x		x	x
Lawrence		x	x	x	x			x	x	x		x	x			x	x	x	x	x			x	x					x
Lebanon		x	x	x	x			x	x	x		x	x		x	x	x	x	x				x	x	x	x			x
Lehigh	x	x	x	x	x			x	x	x		x	x			x	x	x	x	x		x	x	x				x	x
Luzerne		x	x	x	x	x		x	x	x		x	x			x	x	x	x	x		x	x	x			x	x	x
Lycoming		x	x	x	x	x		x	x	x	x	x	x			x	x	x	x	x			x	x	x			x	x
McKean		x	x	x				x	x	x		x	x			x	x	x	x					x					
Mercer		x	x	x	x			x	x	x	x	x	x			x	x	x	x				x	x					x
Mifflin		x	x	x	x			x	x	x		x	x			x	x	x	x	x			x	x					x
Monroe	x	x	x	x				x	x	x		x	x			x	x	x	x	x			x	x					x
Montgomery		x	x		x			x	x	x		x	x			x	x	x	x				x	x					x
Montour		x	x	x	x	x		x	x	x		x	x		x	x	x	x	x	x			x	x	x				x
Northampton	x	x	x	x	x			x	x	x		x	x			x	x	x	x	x			x	x					x
Northumberland		x	x	x	x	x		x	x	x		x	x		x	x	x	x	x	x			x	x	x			x	x
Perry		x	x		x			x	x	x	x	x	x			x	x	x	x				x	x					x
Philadelphia			x						x							x	x												
Pike		x	x					x	x	x		x				x	x	x	x					x					
Potter		x	x		x	x		x	x	x		x	x			x	x	x	x			x		x	x				x
Schuylkill	x	x	x	x	x		x	x	x	x		x	x			x	x	x	x	x		x	x	x	x				x
Snyder		x	x	x	x	x		x	x	x		x	x		x	x	x	x	x	x			x	x				x	x
Somerset		x	x		x			x	x	x	x	x	x			x	x	x	x			x	x	x					x
Sullivan		x	x					x	x	x		x	x			x	x	x	x					x					
Susquehanna		x	x					x	x	x	x	x	x			x	x	x	x					x					
Tioga		x	x	x	x			x	x	x	x	x	x			x	x	x	x				x	x					x
Union		x	x	x	x	x		x	x	x		x	x		x	x	x	x	x				x	x				x	x
Venago		x	x	x	x			x	x	x		x	x			x	x	x	x				x	x					x
Warren		x	x					x	x	x		x	x			x	x	x	x					x					
Washington		x	x	x	x			x	x	x	x	x	x			x	x	x	x	x			x	x					x
Wayne		x	x					x	x	x	x	x	x			x	x	x	x					x					x
Westmoreland	x	x	x	x	x			x	x	x	x	x	x			x	x	x	x				x	x					x
Wyoming		x	x	x				x	x	x		x	x			x	x	x	x				x	x			x		x
York	x	x	x	x	x	x		x	x	x	x	x	x		x	x	x	x	x	x		x	x	x	x				x
Total counties	**14**	**66**	**67**	**45**	**54**	**15**	**1**	**66**	**67**	**66**	**29**	**66**	**57**	**1**	**10**	**67**	**67**	**66**	**66**	**30**	**1**	**13**	**51**	**66**	**12**	**3**	**4**	**16**	**57**

More information on crop insurance and agricultural risk management can be found on the Internet:

United States Department of Agriculture, Risk Management Agency
http://www.rma.usda.gov

Penn State Crop Insurance Education
http://cropins.aers.psu.edu

Pennsylvania Department of Agriculture
http://www.pda.state.pa.us

National Ag Risk Education Library
http://www.agrisk.umn.edu

Northeast Center for Risk Management Education
http://www.necrme.org

This publication is for educational purposes only and does not cover all aspects of the crop insurance products described. For specific information about crop insurance products and how they could help you manage risk on your operation, visit your local crop insurance agent.

Prepared by:

Jayson K. Harper
Professor of Agricultural Economics
Department of Agricultural Economics and Rural Sociology
The Pennsylvania State University

Visit Penn State's College of Agricultural Sciences on the Web: http://www.cas.psu.edu

Penn State College of Agricultural Sciences research, extension, and resident education programs are funded in part by Pennsylvania counties, the Commonwealth of Pennsylvania, and the U.S. Department of Agriculture.

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PENNSYLVANIA CROP INSURANCE EDUCATION & PARTICIPATION PROGRAM
A PARTNERSHIP OF THE USDA RISK MANAGEMENT AGENCY, THE PA DEPARTMENT OF AGRICULTURE, AND THE PENNSYLVANIA STATE UNIVERSITY