Crop Insurance for Pennsylvania Field Crops

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Multi-peril crop insurance is a valuable risk management tool that allows you to insure against losses on your farm 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. In recent years, around $500 million in crop insurance protection has been purchased by agricultural producers annually in Pennsylvania. Nearly $400 million has been paid to farmers for losses in the past ten years. Drought is the largest cause of loss in agronomic crops (45%), followed by excess moisture (32%) (Table 1).

The crop insurance program is the centerpiece of the Federal government's effort to provide a safety net for farmers. Crop insurance is available nationwide and gives you the freedom to choose the level of coverage you need based on your own risk experiences and preferences. A wide range of insurance plans are available for over 100 commodities (a listing of various types of coverage can be found on the USDA-Risk Management Agency's website. A minimum level of crop insurance, called Catastrophic Risk Protection or CAT insurance, is available to all farmers regardless of size. There is no premium cost (all premiums are paid by the federal government) for CAT coverage; there is however an administrative fee of $655 for each crop insured in the county. 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 2018 Farm Bill, to be eligible for future disaster assistance programs you 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 crop insurance subsidies, you must also be in conservation compliance, demonstrating that your operation conforms to highly erodible land and wetland conservation provisions.

Crop insurance policies are available for at least one commodity in every county in Pennsylvania, with a total of 36 policies available to provide protection for a wide variety of agricultural businesses. Field crops covered include corn, corn silage, soybeans, wheat, barley, spring oats, grain sorghum, forage seedings, forage production (including pasture), hemp, and tobacco.

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 for corn, soybeans, and wheat,
- identifying crop insurance options for livestock producers,
- listing important crop insurance deadlines in Pennsylvania.

PennState Extension

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 for major crops in most counties. Revenue protection, dollar value, and area risk protection policies may also be available. Insurance protection is also available on a whole-farm basis (Whole-Farm Revenue Protection, WFRP) in every county in Pennsylvania. A table listing the insurance plans available by county can be found at the end of this article.

If crop insurance is not available for a crop you grow in your county, coverage may still be available via a written agreement. If you are in a county where premium rates are not established for a crop which is insured elsewhere in the U.S., you may be able to get protection provided that you have acceptable 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 selecting a given crop insurance policy or level of protection, you should first consider how much financial risk you are willing and able to bear and what you need to protect. Some common risk-management objectives are:

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

Plans of Insurance Available

Yield Protection (YP) insurance is available in most Pennsylvania counties for corn, soybeans, grain sorghum, barley, and wheat. Under this plan you select a level of coverage from 50 to 85 percent of your average yield to insure. You can also select between 55 and 100 percent of the crop price determined annually by USDA's Risk Management Agency (RMA) (referred to as the "projected price" which is based on Chicago Board of Trade (CBOT) futures prices). If your harvested production plus any appraised production is less than the yield you insured, you are paid for the loss based on the difference multiplied by the price you selected when the crop insurance was purchased and by your share in the crop.

Actual Production History (APH) insurance is available is all Pennsylvania counties for forages, hemp, and oats, and in a limited number of counties for tobacco. You select a level of coverage from 50 to 75 percent of your average yield to insure. You can also select between 55 and 100 percent of the crop price established annually by USDA-RMA. Losses are paid in the same manner as for yield protection policies. APH policies are also available for some fruits and vegetables in various counties in the state.

Catastrophic Risk Protection (CAT) is an insurance-based producer safety net that provides a minimum level of protection against crop losses 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 $655/crop/county, you get a crop insurance yield guarantee of 50 percent of your operation'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 may be enough to protect them against severe cash-flow shortfalls. However, because of the high administrative fee charged for CAT coverage, many smaller field crop farmers may be able to obtain higher levels of protection at less overall cost per acre with buy-up levels of coverage available through YP and APH policies.

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

Two revenue plans are available. The first plan of insurance 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 plan of insurance is called Revenue Protection with Harvest Price Exclusion which for a reduced premium sets your revenue guarantee at the projected early season price only. 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 56 counties, barley in 54 counties, and wheat in 57 counties. The CAT coverage level is not available for the Revenue Protection insurance plan.

Area Yield Protection (AYP) is an insurance plan that provides coverage based on county yields. AYP insurance is available for forage production in 25 counties in Pennsylvania. Under this insurance plan, when the county yield for the insured crop falls below your chosen trigger level, you receive a loss payment. Final county yields are based on data from the National Agricultural Statistics Service (NASS), crop insurance records, and other sources. Payments are not based on your individual yields. Coverage levels are available for 70 to 90 percent of the expected county yield (CAT coverage is also available under AYP). AYP coverage involves less paperwork and costs less than individual farm-level coverage. However, your individual crop losses may not be covered if the county yield does not show a similar level of loss. You are best protected with this type of insurance if your crop losses typically follow the same pattern as your county.

Pasture, Rangeland, and Forage (PRF) coverage is available for hay and forage in all counties in Pennsylvania under the **Rainfall Index (RI)** plan of insurance. Unlike traditional county-based Area Yield Protection insurance, RI is based on where your farm is located in grids that measure 0.25 degrees of longitude and latitude (approximately 13.2 x 17.2 miles in Pennsylvania). The RI policy protects you against yield losses related to lack of precipitation and uses a rainfall index as a measure of crop productivity. The rainfall index is based on National Oceanic and Atmospheric Administration Climate Prediction Center (NOAA CPC) data. You have the flexibility of insuring all or part of your acreage for all or part of the year, but you must choose at least two, 2-month time periods during a calendar year. You also select a productivity factor of between 60 and 150 percent of the county base value to match the amount of your protection to the value of the forages you grow. 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. Apiculture coverage is also available for honeybees and their byproducts under the RI plan of insurance.

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.

Whole-Farm Revenue Protection (WFRP) insures the revenue of your entire farm rather than individual crops by guaranteeing a percentage of your approved farm revenue. You can buy WFRP alone or with other buy-up level crop insurance policies. For example, if you raise corn and soybeans along with livestock and other crops, you could cover your corn and soybeans under individual crop insurance policies and use WFRP as an umbrella policy over the rest of your operation. You cannot use CAT coverage with WFRP.

WFRP uses information from your Schedule F tax records (or a “Substitute Schedule F for WFRP Purposes” if you do not file a Schedule F) from the past five consecutive years of to calculate the policy’s approved revenue guarantee. Operations that have expanded over time may be allowed to increase the approved revenue amount based on an indexing procedure. Depending on the number of commodities grown, you have the choice of coverage of 50-85% of your approved revenue (CAT level coverage is not available for WFRP). Coverage and premium costs depend on the level of diversification in your operation; the maximum level of insured revenue is $8.5 million (based on maximum adjusted gross revenues of $17.0 million and the 50% coverage level). WFRP also provides replant coverage if it not already covered under an underlying individual crop policy.

Claims for losses under WFRP are settled after taxes are filed for the insurance year. The sign-up deadline is March 15 for calendar year and early fiscal year tax filers and November 20 for late fiscal year tax filers. More information on WFRP can be found at the USDA Risk Management Agency's Whole-Farm Revenue Protection (WFRP) website.

Other Coverage Options

Prevented Planting Coverage provides protection whenever an eligible crop cannot 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 individual barley, corn, soybean, grain sorghum, oat, 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 for buy-up level policies. Prevented planting coverage is not available on area plans.

Supplemental Coverage Option (SCO) is a crop insurance option that provides additional county-level coverage for a portion of your underlying crop insurance policy deductible for corn, soybeans, oats, wheat, barley, grain sorghum (York County only), and forage production (SCO is also available on a limited basis for apples, peaches, grapes, potatoes, and processing beans). You buy SCO as an endorsement to your eligible Yield Protection, Revenue Protection, Revenue Protection with Harvest Price Exclusion policy, or Actual Production History. The amount of SCO coverage you can purchase is based on the level of protection in your individual crop insurance policy. SCO coverage begins to pay when the county average yield or revenue for the crop falls below 86 percent of its expected level. The maximum amount of your SCO coverage is paid out when the county average yield or revenue falls to the coverage level of your underlying crop insurance policy. The Federal Government pays 65 percent of the premium cost for SCO. If you elected to participate in the Agriculture Risk Coverage (ARC) program administered by the USDA-Farm Service Agency, you are not eligible for SCO coverage.

Hurricane Insurance Protection-Wind Index (HIP-WI) Endorsement can help cover some of the deductible in your underlying crop insurance policy when your county, or a county adjacent to it, is declared to have experienced sustained hurricane-force winds from a named hurricane. The hurricane insurance protection-wind index (HIP-WI) endorsement can be added to your crop insurance coverage in Berks, Bucks, Chester, Delaware, Lancaster, Lehigh, Montgomery, Northampton, and Philadelphia Counties.

Settlement of any claims will be made within 30 days after the list of counties identified as meeting the county loss trigger is determined by the National Hurricane Center (NHC) at the National Oceanic and Atmospheric Administration (NOAA).

To be eligible for the HIP-WI Endorsement, you must:

- Have an underlying crop insurance policy
- Elect HIP-WI on or before the sales closing date for the underlying policy
- Elect a HIP-WI coverage percentage; and
- Comply with all terms and conditions of the HIP-WI Endorsement.

Because this is an index-based insurance product, there are no separate acreage reporting requirements and you are not required to file a notice of loss. There is a separate administrative fee and premium charged for participation in this optional coverage. The premium subsidy for this program is 65%

Crop insurance coverage for organic farmers

Organically grown crops may also be eligible for crop insurance coverage. Coverage is available for certified organic acreage, transitional acreage, and buffer zones. When reporting acreage, you must have written certification for your organic and transitional acreage and records from a certifying agency of the location of your organic production. Organic price elections or insurance dollar amounts are determined by RMA for the current crop year. Premiums may be adjusted to recognize any additional risk associated with covering organic crop acreage. Coverage for organic crops sometimes requires use of a written agreement; check with your crop insurance agent for more information.

Determining your Actual Production History

The first step in participating in the 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 your 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 Risk Protection (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 verifiable 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 provided in the actuarial documents. 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, a farmer's calculated APH yield may be considerably below the actual expected yield because of the inclusion of 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 or more years of production history are available, your APH is the average of all 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 10-year moving average. When a new year of production history is added, the oldest record is dropped from the APH calculation.

Generally, 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 (80 percent for new and beginning farmers). There is a slightly higher premium when this option is selected.

Trend-adjusted Actual Production History (TA)

Pennsylvania farmers in certain counties have the option to use Trend-Adjusted Actual Production History (TA) yields to increase their APH yields for corn, soybean, and wheat. The TA adjustment better reflects increases in yield experienced by farmers using certain farming practices, including planting hybrids with modified genetic traits. The TA option has been available to Pennsylvania farmers since 2013.

Because an APH yield is based on between 4 and 10 years of a yield data, producers with long yield histories can be penalized because their older yields lag behind their more recent ones. In this situation, producers with less yield history can actually have higher average yields. The TA factor was designed to overcome this problem. It adjusts eligible yields, in qualifying APH databases, to reflect long-term increases in county historical yields.

The TA factor is equal to the estimated annual increase in county yield and is based on county average yields determined by the National Agricultural Statistics Service (NASS) each year. Each yield reported for the individual insurance unit’s APH history is adjusted upward by the trend adjustment factor.

The TA option is available for either yield protection or revenue protection policies, at all levels of guarantee. A producer who wishes to participate must farm in an eligible county and have an actual yield in at least one of the past four years. Producers must choose the TA yield endorsement for their existing or new insurance policy by the applicable sales closing date for the crop. The TA option is not available for corn silage, organic corn or soybeans, and CAT policies.

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 above average yields. Because of this, 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 your acreage as basic units entitles you to a 10 percent discount on your premiums. CAT policies are only eligible for basic units.

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 that reflect yield variability in different locations due to soil type or rotational history. Optional units may also be established by FSA farm serial number (FSN) or Written Unit 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 maintained and reported for each optional unit. 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 (in some cases as much as 50% or more). Choosing enterprise units combines all 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. Enterprise units can be used 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 actuarial documents for your county.

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 usually represent larger acreages than basic or optional units, yields tend to be less variable and are less likely to trigger a loss payment in a given year. However, this could be partially offset by purchasing higher levels of coverage with the premium savings. However, loss payments would be similar for optional and enterprise unit structures if there is a widespread severe disaster that would trigger losses on all optional units for a crop.

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, your chosen 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. If you use basic or enterprise units rather than optional units, you are eligible for additional premium discounts.

For yield protection policies 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 revenue protection policies (available only for corn, grain sorghum, soybeans, wheat, and barley) 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 homeowner’s 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 is more than 25 percent, your crop insurance would cover the difference. Like other types of insurance, higher levels of deductible 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 would reduce 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, the projected price or price elections, and any optional coverage you choose for the crop that you are insuring. If commodity prices change the projected price or price elections, then your amount of crop insurance protection and premiums will also change.

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 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 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 by 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 Reference Maximum Dollar Amount of coverage x coverage level Total premium/acre = Dollar guarantee x 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 and levels of crop insurance protection available, a farmer wishing to insure corn, soybeans, and wheat in a medium-risk county will be used as examples (Table 2). 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 150 bushels per acre for corn, 45 bushels for soybeans, and 70 bushels for wheat.

In the top section of Table 2 you can see how yield protection and revenue protection insurance protect the cash flow for the corn crop. In this example, CAT would only pay the farmer $160/A for a total crop loss. Higher levels of yield and revenue protection provide better cash-flow protection for this farmer. A minimum cash flow of $285 to $455/A is guaranteed in exchange for a producer-paid premium of $5.13 to $48.08/A. If the farmer in this example is not participating in USDA-FSA’s ARC program, additional cash flow protection of $6-$210 would be available through SCO.

In the middle section of Table 2 you can see how yield protection and revenue protection insurance protect the cash flow for the soybean crop. In this example, CAT would only pay the farmer $113/A for a total crop loss. Higher levels of yield and revenue protection provide better cash-flow protection for this farmer. A minimum cash flow of $203 to $320/A is guaranteed in exchange for a producer-paid premium of $2.75 to $35.93/A. If the farmer in this example is not participating in USDA-FSA’s ARC program, additional cash flow protection of $4-$149 would be available through SCO.

In the bottom section of Table 2 you can see how yield protection and revenue protection insurance protect the cash flow for the wheat crop. In this example, CAT would only pay the farmer $95/A for a total crop loss. Higher levels of yield and revenue protection provide better cash-flow protection for this farmer. A minimum cash flow of $171 to $266/A is guaranteed in exchange for a producer-paid premium of $1.34 to $32.69/A. If the farmer in this example is not participating in USDA-FSA’s ARC program, additional cash flow protection of $3-$124 would be available through SCO.

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 the futures prices is 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. 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.

The only advantage of having no crop insurance is saving the premium cost (but this is lessened because crop insurance is a deductible business expense). 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 choose a coverage level, price election, and insurance unit combination that accomplishes your goal.

Crop Insurance for Livestock Producers

Coverages for Forages

Crop insurance products have also been developed for farmers who produce forages for on-farm use. The YP plan of insurance is available for corn silage and the APH plan of insurance is available for forage production (alfalfa and alfalfa mixtures). Forage production (including pure grass hay stands) can also be insured under AYP 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 Pasture, Rangeland, Forage (PRF) Rainfall Index plan of insurance.

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 AYP plans). Because of the numerous ways that forages can be harvested and stored, and depending on when they are fed, field visits by a representative of your crop insurance company may be 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 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 (less than 4.5 bu./ton) due to insurable causes, a pre-harvest appraisal should be requested as you may be eligible for quality adjustment. 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 AYP forage production policies are available for 25 counties and can be purchased by farmers producing any hay crop (not just alfalfa or alfalfa-mixtures). AYP coverage is based on the average yield of the entire county rather than on your actual yields. Coverage at the CAT level or at 60 to 100 percent of the expected county yield can be purchased for significantly less than yield protection insurance. AYP works best if your yields closely track county yields or if you do not wish to or cannot furnish individual yield records.

The grid-based Rainfall Index Pasture, Rangeland, and Forage (PRF) 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 another locally recognized and approved legume species by weight. Another restriction is that acreage covered by a forage seeding policy cannot be grazed during the insurance period.

Coverages for Livestock

There are also crop insurance products available to help dairy, beef, swine, and lamb producers manage their market risk.

The Dairy Revenue Protection (RP) is designed to protect you against declines in your quarterly revenue from milk sales relative to a selected guaranteed coverage level. You have the choice of two revenue pricing options, either a combination of Class III and IV prices or a component pricing option based on butter fat, protein, and other solids. You can cover 70 to 95 percent of your expected quarterly revenue (in 5 percent increments). Dairy-RP is available on a quarterly basis and you can purchase coverage for up to 5 nearby quarters.

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 for coverage of the following 11 months. The insurance guarantee is met by either income from the marketplace and/or an insurance indemnity. The monthly enrollment period is the last business Friday in the month. The 2018 Farm Bill allows farmers to participate in both LGM-Dairy and the USDA-FSA Dairy Margin Coverage (DMC) program.

The Livestock Risk Protection (LRP) for feeder cattle (animals expected to weigh up to 900 lbs. at the end of the insurance period) policy is designed to protect against declines in market prices. This policy can be purchased weekly and the length of insurance can be set for 13, 17, 21, 26, 30, 34, 39, 43, 47, or 52 weeks. Producers select coverage prices ranging from 70 to 100 percent of the expected ending value. An indemnity will be paid if the actual ending price is below the selected coverage price at the end of the insurance period. A maximum of 2,000 head of feeder cattle per producer per reinsurance year (July 1-June 30) can be covered by the LRP-Feeder Cattle policy.

The Livestock Risk Protection (LRP) for fed cattle (heifers and steers expected to weigh 1,000-1,400 lbs. at the end of the insurance period) policy is designed to protect against declines in market prices. This policy can be purchased weekly and the length of insurance can be set for 13, 17, 21, 26, 30, 34, 39, 43, 47, or 52 weeks. Producers select coverage prices ranging from 70 to 100 percent of the expected ending value. An indemnity will be paid if the actual ending price is below the selected coverage price at the end of the insurance period. A maximum of 4,000 head of fed cattle per producer per reinsurance year (July 1-June 30) can be covered by the LRP-Fed Cattle policy.

The Livestock Risk Protection (LRP) for swine (hogs expected to reach market weight at the end of the insurance period) policy is designed to protect against declines in market prices. This policy can be purchased weekly and the length of insurance can be set for 13, 17, 21, or 26 weeks. Producers select coverage prices ranging from 70 to 100 percent of the expected ending value. An indemnity will be paid if the actual ending price is below the selected coverage price at the end of the insurance period. A maximum of 32,000 hogs per producer per reinsurance year (July 1-June 30) can be covered by the LRP-Swine policy.

The Livestock Risk Protection (LRP) for lamb (animals expected to weigh between 50 and 150 lbs. at the end of the insurance period) policy is designed to protect against declines in market prices. This policy can be purchased weekly and the length of insurance can be set for 13, 26, or 39 weeks. Producers select coverage prices ranging from 80 to 95 percent of the expected ending value. An indemnity will be paid if the actual ending price is below the coverage price at the end of the insurance period. A maximum of 28,000 head per producer per reinsurance year (July 1-June 30) can be covered by the LRP-Lamb policy.

Crop Insurance Benefits for Beginning Farmers

If you are starting your own farming business, you may be eligible for additional crop insurance benefits. These include: 1) eligibility for an additional 10% premium subsidy for buy-up coverage, 2) exemption from the administrative fee for catastrophic (CAT) and buy up policies, 3) use of the production history of an existing farming operation (if you were previously involved in the decision making or physical activities of the farm), and 4) use of an 80% yield plug for replacing low APH yields (rather than the 60% yield plug available to everyone else).

These benefits are available if you and all others with a beneficial interest (10 percent or more) in the business have not actively operated or managed a farmed with an insurable interest in any crop or livestock for more than 5 years. You can exclude a crop year's insurable interest if you were under age 18, enrolled in post-secondary studies, or on active duty in the U.S. military. For more information on programs to assist new and beginning farmers, visit USDA's New Farmers website.

How Can I Find a Crop Insurance Agent?

Although crop insurance is a federally subsidized program, it is sold by private crop insurance agents:

- 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.

- A list of crop insurance agents in your area can be found on the USDA Risk Management Agency's website.

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 3. You must be aware of several important dates for filing information and reporting losses:

Sales Closing Date (enrollment and policy change date) —last day to apply for coverage or make changes to the policy; the sign-up deadline.

Earliest 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 covered at reduced levels for some crops.

Acreage reporting date —last day to report the acreage as 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 your Actual Production History (APH).

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

Premium 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.

Farm Service Agency Risk Management Programs

The federal government has other programs designed to help you manage your risk. Four important programs administered by USDA-FSA that could impact your farm are the Noninsured Disaster Assistance Program (NAP), Agricultural Risk Coverage (ARC), Price Loss Coverage (PLC), and Dairy Margin Coverage (DMC). For more information on USDA-FSA programs or to find the location of your local FSA office visit the USDA Farm Service Agency website.

Noninsured Disaster Assistance Program (NAP). The Noninsured Crop Disaster Assistance Program (NAP) provides financial assistance to producers of crops for which multi-peril crop insurance coverage is not available. NAP is designed to help reduce financial losses when natural disasters cause major reductions in production. The basic level of NAP coverage is similar to that provided by CAT policies for insurable crops (50 percent of expected production at 55 percent of the average market price). Higher levels of protection at the 50, 55, 60, and 65 percent levels at 100 percent of the average market price are available for additional premium.

Producers eligible for the NAP program include landowners, tenants, and sharecroppers who produce eligible crops and who have less than $900,000 in adjusted gross revenue annually. Payments are limited to $125,000 for basic coverage or up to $300,000 for higher levels of coverage per crop year. To purchase NAP coverage, you pay a service fee of $325 per crop per county (with fees capped at $825 per producer per county, but not to exceed a total of $1,950 for producers growing crops in multiple counties). For higher levels of coverage, a 5.25% premium also applies (maximum premium is $15,570 based on the $300,000 maximum payment limitation). Sign up deadlines and coverage periods for NAP vary by crop; contact your local FSA office for more information.

Agricultural Risk Coverage (ARC) and Price Loss Coverage (PLC). ARC and PLC income support programs were reauthorized under the 2018 Farm Bill. ARC provides payments when actual crop revenue declines below a specified guarantee level, while the PLC program provides payments when the effective price for a covered commodity falls below its effective reference price. Covered commodities for Pennsylvania include corn, soybeans, wheat, barley, oats, and grain sorghum. Any annual payments under the ARC or PLC program will be issued on October 1 of the following year.

Farm operators must choose between participating in either the ARC or PLC program. The program election made by the farm operator remains with the farm for the life of the Farm Bill, however, operators must still enroll their farms annually to be eligible to receive payments. These programs give farm operators and landowners the choice of county- or farm-level revenue coverage (ARC-CO and ARC-IC) and fixed price supports (PLC). If either ARC option is chosen, the farm is not eligible for the

Supplemental Coverage Option (SCO) available under crop insurance.

The ARC-CO program provides revenue loss coverage at the county level. ARC-CO payments are issued when actual county crop revenue for a covered commodity is less than the ARC-CO guarantee. The ARC-CO guarantee equals 86 percent of the previous five-year national market year average price, excluding the years with the highest and lowest price (the ARC guarantee price), multiplied by the five-year average county yield, excluding the years with the highest and lowest yield (the ARC county guarantee yield). The ARC payment is equal to 85% of the base acres of the covered commodity multiplied by the difference between the county guarantee and the actual county crop revenue.

The ARC-IC program provides revenue loss coverage at the farm level. An ARC-IC farm is defined as the sum of the interests of a producer in all FSA farms that are enrolled in the ARC-IC coverage option in a state. ARC-IC payments are made when the current year revenue for all covered commodities planted falls below 86 percent of the farm benchmark revenue. The ARC-IC payment is equal to 65% of the total base acres on the farm multiplied by the difference between the individual revenue guarantee and the actual individual crop revenue summed across all covered commodities.

PLC program payments are issued when the effective price of a covered commodity is less than the respective reference price for that commodity. The effective price equals the higher of the market year average price or the national average loan rate for the covered commodity. Producers who have elected PLC and who also participate in the federal crop insurance program are eligible to purchase SCO coverage.

Dairy Margin Coverage (DMC). DMC is a voluntary risk management program for dairy farms authorized under the 2018 Farm Bill to replace the MPP-Dairy Program. DMC offers protection to dairy producers when the national dairy production margin (the difference between the all-milk price and average feed costs) falls below a certain dollar amount selected by the producer. Dairy producers have the choice of a catastrophic coverage level of coverage (for an annual $100 administrative fee and no additional premium cost) and various levels of buy-up coverage (for additional premium).

Catastrophic coverage provides payments to participating producers when the national dairy production margin is less than $4.00 per hundredweight (cwt). Producers may purchase buy-up coverage that provides payments when margins are between $4.00 and $9.50 per cwt. (in $0.50 increments). To participate in buy-up coverage, you must pay a premium that varies with the level of protection the producer elects in addition to the $100 administrative fee. For most dairy operations, the eligible level of production is based on the highest milk production during the period from 2011-2013. Newer operations have other options for determining the eligible level of production. Dairy farmers participating in USDA-FSA's DMC program can also participate in USDA-RMA's DRP and LGM-Dairy programs.

More information on crop insurance and agricultural risk management options:

United States Department of Agriculture, Risk Management Agency

United States Department of Agriculture, Farm Service Agency

United States Department of Agriculture, New Farmers

Pennsylvania Department of Agriculture, Risk Management

National Ag Risk Education Library

Northeast Center for Risk Management Education

Table 1. Causes of loss to agronomic crops paid for by crop insurance , 2010-2019.

Cause of Loss	Percent of losses
Drought	45%
Excessive Moisture	32%
Decline in price	4%
Heat	3%
Wildlife	3%

Hail	2%
Cold, wet weather/freeze	2%
Flood	1%
Wind	1%
Other causes	7%

Table 2. How Crop Insurance Protects your Cash Flow Impact of coverage level on premium cost and minimum cash flow ($/acre).

Corn example: Premiums are for a 150 bushel APH yield in a medium risk county with a projected price of $3.88 per bushel based on the Chicago Board of Trade.

Coverage level 1	Admin. fee 2	Yield Protection: Farmer-paid premium 3	Yield Protection: Yield guarantee	Yield Protection: Minimum cash flow 4	Revenue Protection: Farmer-paid premium	Revenue Protection: Revenue guarantee 5	Revenue Protection Minimum cash flow 4	Supplemental Coverage Option: premium 6	Supplemental Coverage Option: additional cash flow protection
CAT	$655	$0.00	75.0	$160.05	n/a	n/a	n/a	n/a	n/a
50%	$30	$5.13	75.0	$285.87	$6.02	$291.00	$284.98	$8.36	$209.52
55%	$30	$6.96	82.5	$313.14	$8.19	$320.10	$311.91	$8.07	$180.42
60%	$30	$8.57	90.0	$340.63	$10.11	$349.20	$339.09	$7.62	$151.32
65%	$30	$11.91	97.5	$366.39	$14.19	$378.30	$364.11	$6.99	$122.22
70%	$30	$14.51	105.0	$392.89	$17.42	$407.40	$389.98	$6.16	$93.12
75%	$30	$19.18	112.5	$417.32	$23.25	$436.50	$413.25	$4.97	$64.02
80%	$30	$26.49	120.0	$439.11	$32.34	$465.60	$433.26	$3.11	$34.92
85%	$30	$39.52	127.5	$455.18	$48.08	$494.70	$446.62	$0.59	$5.82

Soybean example: Premiums are for a 45 bushel APH yield in a medium risk county with a projected price of $9.17 per bushel based on the Chicago Board of Trade.

Coverage Level 1	Admin. fee 2	Yield Protection: Farmer-paid premium 2	Yield Protection: Yield guarantee	Yield Protection: Minimum cash flow 3	Revenue Protection: Farmer-paid premium	Revenue Protection: Revenue guarantee 4	Revenue Protection: Minimum cash flow 3	Supplemental Coverage Option premium 5	Supplemental Coverage Option additional cash flow protection
CAT	$655	$0.00	22.5	$113.48	n/a	n/a	n/a	n/a	n/a
50%	$30	$2.75	22.5	$203.58	$3.12	$206.33	$203.12	$4.79	$148.57
55%	$30	$3.93	24.8	$223.03	$4.59	$227.42	$222.83	$4.38	$128.18
60%	$30	$5.17	27.0	$242.42	$6.04	$247.56	$241.52	$3.91	$107.29
65%	$30	$7.74	29.3	$260.48	$9.03	$268.68	$259.65	$3.74	$86.80
70%	$30	$10.07	31.5	$278.79	$11.74	$288.86	$277.12	$3.44	$66.03
75%	$30	$14.22	33.8	$295.27	$16.56	$309.95	$293.39	$2.88	$45.46
80%	$30	$20.84	36.0	$309.28	$24.19	$330.12	$305.93	$1.89	$24.76
85%	$30	$31.16	38.3	$319.59	$35.93	$351.21	$315.28	$0.37	$4.13

Wheat example: Premiums are for a 70 bushel APH yield in a medium risk county with a projected price of $4.94 per bushel based on the Chicago Board of Trade.

Coverage Level 1	Admin. fee 2	Yield Protection: Farmer-paid premium 2	Yield Protection: Yield guarantee	Yield Protection: Minimum cash flow 3	Revenue Protection: Farmer-paid premium	Revenue Protection: Revenue guarantee 4	Revenue Protection: Minimum cash flow 3	Supplemental Coverage Option premium 5	Supplemental Coverage Option additional cash flow protection
CAT	$655	$0.00	35.0	$95.10	n/a	n/a	n/a	n/a	n/a
50%	$30	$1.34	35.0	$171.56	$1.77	$172.90	$171.13	$1.93	$124.49
55%	$30	$2.02	38.5	$188.17	$2.71	$190.19	$187.48	$1.75	$107.20
60%	$30	$2.87	42.0	$204.61	$3.82	$207.48	$203.66	$1.57	$89.91
65%	$30	$4.60	45.5	$220.17	$6.04	$224.77	$218.73	$1.36	$72.62
70%	$30	$6.47	49.0	$235.59	$8.35	$242.06	$233.71	$1.24	$55.33
75%	$30	$10.23	52.5	$249.12	$12.87	$259.35	$246.48	$1.12	$38.04
80%	$30	$16.61	56.0	$260.03	$20.43	$276.64	$256.21	$0.81	$20.75
85%	$30	$27.15	59.5	$266.78	$32.69	$293.93	$261.24	$0.19	$3.46

Notes: 1 CAT: catastrophic crop insurance (yield protection only), which provides protection for losses greater than 50% at 55% of the indemnity price (in the examples, $2.13 for corn, $5.04 for soybean, and $2.72 for wheat), is available at no premium cost to the farmer (flat application fee of $655/crop/county regardless of acreage covered). Higher levels of coverage ("buy-up protection") are available for either yield protection or revenue protection insurance for additional premium ($30/crop/county application fee). 2 The administrative fee is charged for each underlying policy, regardless of number of acres. 3 Premiums quoted here reflect a medium-risk county and selection of optional units. Your premiums may be higher or lower depending on the county where you farm and the unit structure you select. Selecting basic units would lower the premium by 10%. Selecting enterprise units could lower the premium by 30-55% depending on type of protection and coverage level. Premiums for revenue protection with the harvest price exclusion policies are 9-17% less than for the revenue protection policy in these examples. 4 Minimum cash flow is the dollar value of the yield or revenue guarantee less premium cost. 5 Revenue guarantee is based on the projected CBOT futures price. If the final harvest price is higher than the projected price, then the revenue guarantee will also increase (unless you choose Revenue Protection with Harvest Price Exclusion). 6 The SCO premium is in addition to the premium for either yield protection or revenue protection. SCO coverage is only available to farmers who did not sign up for USDA-FSA's Agricultural Risk Coverage (ARC).

Table 3. Important Deadlines for Field Crop Insurance in Pennsylvania

Insurance plan	Type of insurance 1	Sales closing	Final planting 2	Acreage reporting	Billing date	End of insurance
Whole-Farm Revenue Protection	WFRP	3/15 or 11/20 3	--	7/15	8/15	3/15 or 11/20 3
Apiculture	Rainfall Index	11/15	--	11/15	9/1	12/31
Apple	APH	11/20	--	1/15	8/15	11/5
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	6/15	7/1	10/31
Cabbage	APH	3/15	7/20	8/15	9/15	11/25
Corn (silage)	Yield, Revenue	3/15	6/10	7/15	8/15	10/20
Corn (grain)	Yield, Revenue	3/15	6/10	7/15	8/15	12/10
Dairy Revenue Protection	LRP	quarterly	--	--	at sign up	--

Forage seeding (fall)	Dollar	7/31	8/31	11/15	7/1 4	10/15, 10/20, or 12/10
Forage seeding (spring)	Dollar	3/15	5/10	6/15	7/1	5/21
Forage production	AYP	9/30	--	11/15	8/15	--
Forage production	APH	9/30	--	11/15	7/1	10/15
Grain sorghum	Yield, Revenue	3/15	6/20	7/15	8/15	12/10
Grape	APH	11/20	--	1/15	8/15	11/20
Green pea	APH	3/15	5/10 or 5/15	5/31	10/1	9/15
Livestock Gross Margin (Dairy)	LGM	monthly	--	--	at sign up	--
Livestock Risk Protection (Fed cattle, Feeder Cattle, Swine, Lamb)	LRP	weekly	--	--	at sign up	--
Oats (spring)	APH	3/15	5/10	6/15	8/15	10/31
Pasture, Rangeland, Forage	RI	11/15		11/15	9/1	12/31
Peach/Nectarine	APH	11/20	--	1/15	8/15	9/30
Pear	APH	11/20	--	1/15	8/15	10/15
Potato	APH	3/15	6/10	7/15	8/15	10/31
Processing bean (snap and lima)	APH	3/15	7/10 or 7/25	8/15	9/15	9/20
Soybeans	Yield, Revenue	3/15	6/10 or 6/20	7/15	8/15	12/10
Sweet corn (fresh-market)	Dollar	3/15	6/30	7/15	8/15	9/30
Sweet corn (processing)	APH	3/15	6/20 or 6/30	7/15	8/15	9/20
Tobacco	APH	3/15	6/30	7/15	1/1	4/30 or 5/15 5
Tomato (fresh-market)	APH	3/15	6/20	7/15	8/15	9/20
Tomato (processing)	APH	3/15	6/5 or 6/10	7/15	8/15	10/10
Wheat	Yield, Revenue	9/30	10/10, 10/20, or 10/31	11/15	7/1	8/31

1 WFRP— whole-farm revenue protection insurance, with loss payments based on revenue shortfalls relative to a guaranteed percentage of your approved farm revenue. -- APH— actual production history insurance, with loss payments based on yield shortfalls relative to a guaranteed percentage of your APH yield and an indemnity price established annually by USDA-RMA. -- Yield—yield protection insurance, with loss payments based on yield shortfalls relative to a guaranteed percentage of your APH yield and a projected price based on Chicago Board of Trade (CBOT) data. -- Revenue— revenue protection insurance plans (including with and without harvest price exclusion), with loss payment based on gross revenue guarantee based on your APH yield and CBOT prices. -- Dollar— dollar plan, with loss payment based on value of your crop relative to the dollar amount of insurance. -- AYP— area yield protection insurance. Loss payments are based on relative county yield level and your selected yield trigger. -- RI— loss

payments are based on a rainfall index based on NOAA data. You choose the coverage level, protection factor trigger, and when the insurance protection is in force. -- LGM— livestock gross margin, loss payment based on difference between your expected gross margin and actual gross margin. -- LRP— livestock risk protection, loss payment based on difference between your actual price and coverage price.

2 Final planting date varies throughout the state. Some crops also have initial planting dates which indicates the earliest a crop may be planted and still remain eligible for replanting coverage, if such coverage is available for the crop.

3 March 15 for calendar year or early fiscal year tax filers, November 20 for late fiscal year tax filers.

4 July 1 of the following season.

5 April 30 for cigar-filler tobacco and May 15 for Maryland-type tobacco.

Crop insurance availability in Pennsylvania by county

County	Whole-Farm Revenue Protection	Apiculture (RI)	Apple (APH)	Apple Trees (Dollar)	Barley (Yield, Revenue)	Bean (processing) (APH)	Cabbage (APH)	Corn (Yield, Revenue)	Dairy Cattle (LGM, LRP)	Fed Cattle (LRP)	Feeder Cattle (LRP)	Forage Production (APH)	Forage Production (AYP)	Forage Seeding (Dollar)	Grain Sorghum (Yield, Revenue)	Grape (APH)	Green Pea (APH)	Hemp (grain, fiber, CBD) (APH)	Hurricane Insurance Plan- Wind Index	Lamb (LRP)	Milk (Dairy Revenue Protection)	Nursery FG&C (Dollar)	Oat (APH)	Pasture, Rangeland & Forage (Dollar)	Peach (APH)	Pear (APH)	Potato (APH)	Soybean (Yield, Revenue)	Sweet Corn (fresh) (Dollar)	Sweet Corn (processing) (APH)	Swine (LRP)	Tobacco (type 232, Maryland) (APH)	Tobacco (type 234, cigar filler) (APH)	Tomato (fresh) (APH)	Tomato (processing) (APH)	Wheat (Yield, Revenue)
Adams	x	x	x	x	x	x		x	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	x	x	x					x		x					x
Armstrong	x	x			x			x	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	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	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	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	x			x	x	x	x					x
Bradford	x	x	x	x	x			x	x	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	x	x	x			x	x		x					x
Butler	x	x	x	x	x			x	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	x	x		x					x
Cameron	x	x						x	x	x	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	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				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	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	x	x		x					x
Clearfield	x	x			x			x	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	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	x	x	x				x	x
Crawford	x	x			x			x	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	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	x	x	x	x				x	x
Delaware	x	x			x			x	x	x	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	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	x		x			x	x	x
Fayette	x	x			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	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	x			x	x		x				x	x
Fulton	x	x			x			x	x	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	x	x					x		x					x
Huntingdon	x	x			x	x		x	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	x			x	x		x				x	x
Jefferson	x	x			x			x	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	x	x			x	x		x					x
Lackawanna	x	x						x	x	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		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	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				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		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	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			x	x	x	x				x	x
McKean	x	x						x	x	x	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				x	x		x					x
Mifflin	x	x	x	x	x			x	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	x			x	x		x					x
Montgomery	x	x			x			x	x	x	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	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	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		x	x	x	x	x				x	x
Perry	x	x			x			x	x	x	x	x	x	x	x			x		x	x	x	x	x				x	x		x					x
Philadelphia	x	x							x	x	x								x	x	x	x		x							x					
Pike	x	x						x	x	x	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			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		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	x			x	x		x				x	x
Somerset	x	x			x			x	x	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	x	x	x				x	x		x					
Susquehanna	x	x						x	x	x	x	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	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	x				x	x		x				x	x
Venago	x	x	x	x	x			x	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	x	x	x					x		x					
Washington	x	x	x	x	x			x	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	x	x					x		x					x
Westmoreland	x	x			x			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	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	x	x	x	x					x
Total counties	67	67	37	37	54	15	2	66	67	67	67	66	25	66	57	6	10	66	8	67	67	67	66	67	30	1	14	56	66	12	67	1	3	4	16	57

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