



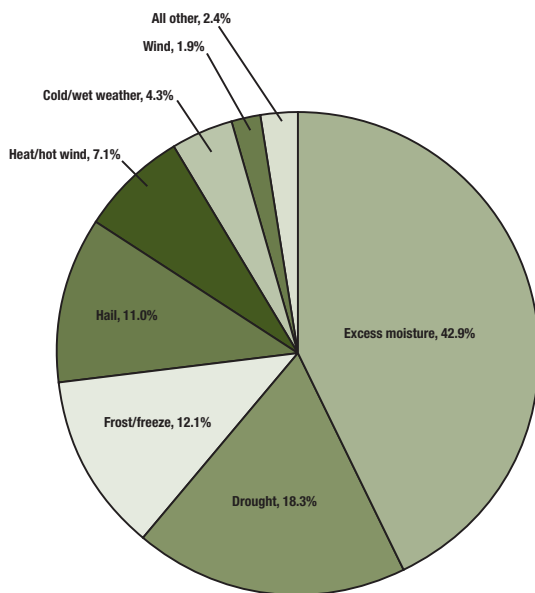
Crop Insurance

FOR NEW YORK FIELD CROPS

Multi-peril crop insurance is a valuable risk management tool that allows growers to insure against losses due to adverse weather conditions and wildlife. It shifts unavoidable production risks to an insurance company for the payment of a fixed amount of premium per acre. Of the \$167 million paid for crop losses in New York since 1981 (\$146 million in the past ten years), 43 percent was for excess moisture (Figure 1).

Participation in the crop insurance program in New York has increased dramatically since the 1990's, with a large increase in acreage and coverage due to excess moisture and droughts experienced in many parts of the state in recent years. Sign up for crop insurance is over 800,000 acres and protection in force exceeds

Figure 1. Why crops fail in New York, 1981-2008
(\$167 million in losses paid by crop insurance)



\$357 million. The amount paid to producers for crop losses exceeded the total amount producers paid for the protection in 19 out of the past 20 years (Figure 2). During that time period, New York farmers with crop insurance have received \$3.14 for crop losses for every \$1 they have paid in premiums.

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 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).

Crop insurance is available for at least one commodity in every county in New York, with a total of 24 crops 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 dry beans. Field crops account for 89 percent of all the acres covered by crop insurance in New York and represent about 45 percent of the value of insurance protection sold on a per acre basis.

The purpose of this publication is to introduce the types of crop insurance available to field crop producers by:

- 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 New York.

Types of crop insurance policies. Farmers who grow field crops may select from various crop insurance policies. Yield-based actual production history (APH) insurance at CAT and buy-up levels is available for major crops in most counties. Revenue insurance, 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 16 counties and as AGR-Lite in 52 counties. If crop insurance is not available for a crop in your county, coverage may still be available via a written agreement; 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 risk you are willing to bear and what you need to protect.

Some common objectives are:

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

YIELD-BASED INSURANCE COVERAGE:

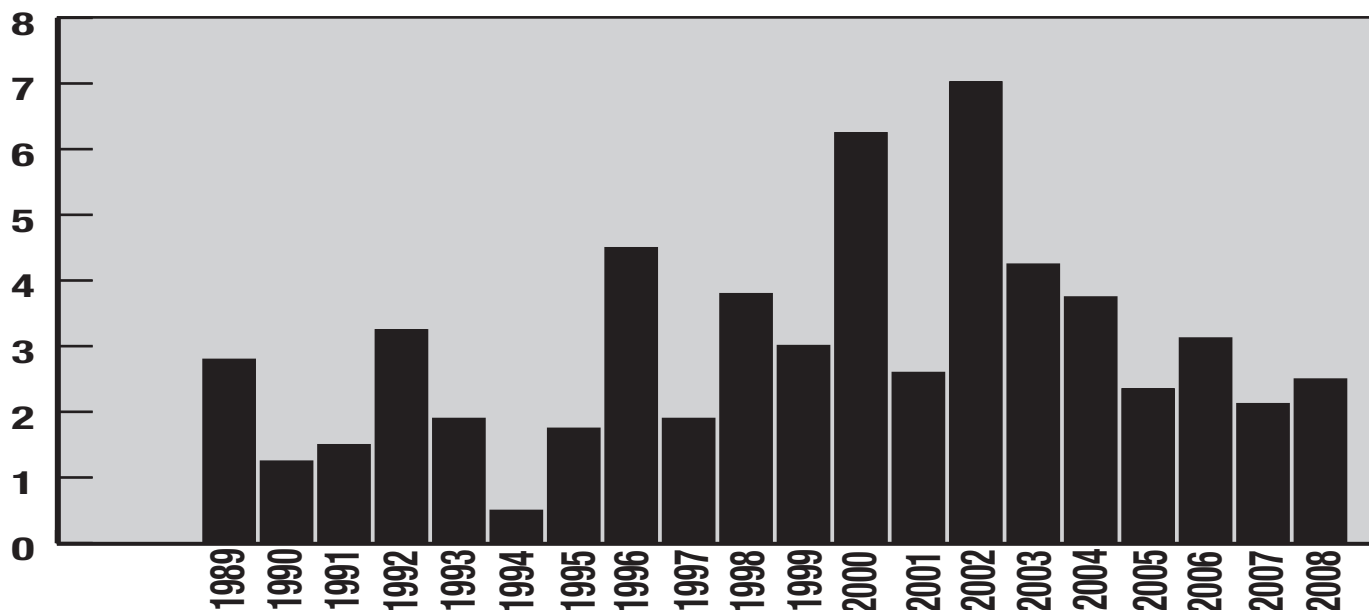
Actual Production History (APH) insurance protects producers against losses due to natural causes such as drought, excessive moisture, hail, wind, frost, insects, and disease. The APH plan is sometimes referred to as Multiple Peril Crop Insurance (MPCI). Farmers select from 50 to 75 percent of the amount of their average yield to insure. Farmers can also select between 55 and 100 percent of the crop price established annually by the United States Department of Agriculture, Risk Management Agency (USDA, RMA). If the harvest is less than the yield insured, the farmer is paid for the

loss based on the difference. Loss payments are calculated by multiplying this difference by the insured percentage of the established price selected when crop insurance was purchased. APH policies are available in most New York counties for corn and oats. APH policies are also available in some counties for soybeans, forages (containing more than 25% alfalfa), grain sorghum, barley, wheat, and dry beans.

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 a farmer's 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, producers get a crop insurance yield guarantee of 50 percent of their 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 level of coverage is enough to protect them against severe cash-flow shortfalls. Corn farmers who are interested in a revenue-based insurance program rather than a yield-based program can get CAT levels of Indexed Income Protection.

Group Risk Plan (GRP) policies use a county index as the basis for determining a loss. When the county yield for the insured crop, as determined by the

Figure 2. Farmer benefits from crop insurance per \$1 of premium, New York, 1989-2008



National Agricultural Statistics Service (NASS), falls below the chosen trigger level, a loss payment is made to the farmer. Payments are not based on the individual farmer's 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, individual crop losses may not be covered if the county yield does not suffer a similar level of loss. Farmers best protected by this type of insurance are those with crop losses that typically follow the county pattern. GRP is available for corn in 30 counties in New York.

A new group risk policy is available on a pilot program basis for pastures, rangeland, and forage in 15 counties in southern New York. Unlike traditional yield-based, county level GRP policies, it uses approximate 12 x 12 square mile grids and a rainfall index as a measure of crop productivity. Producers are insured based on their location (grid) rather than their county. The rainfall index policy protects farmers against yield losses related to lack of precipitation. It is based on historical NOAA rainfall data and NEXRAD weather radar system data. Producers must choose at least two, 2-month time periods to insure under the rainfall index policy. Because this policy is only available on a pilot program basis, producers outside these 15 counties can not obtain coverage through a written

agreement with their crop insurance agent. Honey bees and byproducts may also be insured in every county in the state under this plan via an apiculture endorsement.

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 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. Farmers may select a percent of the maximum dollar amount equal to CAT (catastrophic level of coverage) or additional coverage levels. The Dollar plan is available for forage-seeding policies in 8 counties in New York. Many field crop producers may also be interested to know that Dollar plan coverage is also available for fresh-market sweet corn in 54 counties in New York.

REVENUE INSURANCE PLANS:

Crop Revenue Coverage (CRC) is an insurance product for corn, soybean, and wheat that provides protection against both yield and price risk. Unlike APH policies that cover only yield losses, CRC provides revenue protection. The farmer selects a level of revenue to protect based on price and yield expectations. Losses are paid if revenues fall below the guarantee at the higher of an early-season or late-season price as determined from futures prices on the Chicago Board of Trade (CBOT). Late versus early season prices are covered for up to 100% increases and unlimited decreases. CRC coverage is available for corn in 52 counties, soybean in 24 counties, and wheat in 27 counties. CRC insurance is not available as CAT coverage.

Indexed Income Protection (IIP) is an insurance product that is available for corn growers. Losses are paid if revenues fall below the guarantee because of price or yield declines from early-season expectations. IIP coverage is available for corn in 52 counties. CAT coverage under IIP may offer more benefits than yield-based CAT coverage depending on the producer's unit structure, average yield, and price election for the crop year.

Gross Revenue Income Protection (GRIP) is a group-risk revenue insurance product based on the GRP yield program and is available for corn in 30 counties.

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.

For this program, county-level GRP yield information is converted to revenue using the producer's choice of either the price formula for IIP or CRC.

Adjusted Gross Revenue (AGR and AGR-Lite)

insure the revenue of the entire farm rather than an individual crop by guaranteeing a percentage of average gross farm revenue. These plans use information from the past five consecutive years of a producer's Schedule F tax forms to calculate the policy revenue guarantee. Depending on the number of commodities grown, producers 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 16 counties in New York. 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, MPCl coverage is also required (CAT insurance can be used to meet this requirement). The maximum policy size for AGR is \$6.5 million (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 (no limitation on livestock income) and making it available to farmers in 52 counties statewide. The application process for AGR-Lite is also streamlined in various ways and there is no requirement for the purchase of MPCl (but it may be purchased at the producer's option). The maximum policy size for AGR-Lite is \$1 million (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 New York, prevented planting coverage is automatically part of all barley, corn, soybean, grain sorghum, oat, wheat and dry bean 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 the actual production history

The first step in developing a crop insurance program is to establish your actual production history (APH). This is used to set the guarantees under the APH, CAT, CRC, and IIP plans of insurance. Assessing the need for production risk protection must be based on your farm's production potential and yield variability. 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 APH or coverage under revenue 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 growers 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. In that case, buying a GRP or GRIP policy (if available) is an alternative strategy, since guarantees for these plans are based on county yields rather than individual farm yields. This could provide a higher level of protection while allowing you to accumulate records to establish an APH yield. However, remember that GRP and GRIP loss payments are calculated based on the county average yield and you might not be paid for an individual loss on your farm.

New farmers or those who have never planted the crop 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 producers who have previously been closely associated with a particular farming operation, such as children taking over a family farm, can use the previous operator’s records to establish their APH yield.

When four years of production history are available, the APH is the average of all of the yearly reported yields. Additional years of data will be averaged into the APH yield until 10 years are included. Once 10 years of yields are available, the 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 the APH history, the APH cannot decrease by more than 10 percent in any one year. The APH can not fall to less than 70 percent of the “T”-yield for growers with only one year of yield records, 75 percent for growers with two to four years of yield records, and 80 percent for growers 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 the 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

FEDERAL DISASTER ASSISTANCE PROGRAMS

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 the NAP program vary by crop; contact your local FSA office for more information.

Supplemental Revenue Assistance Payments (SURE)

Many producers do not buy Buy-up or AGR coverage because they self-insure with other risk management tools. In the past, many producers did not buy CAT or NAP coverage because they felt that if a catastrophic event occurs, the U.S. government would offer disaster assistance. The 2008 Farm Bill created a permanent disaster 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, producers are required to purchase crop insurance or NAP coverage on all crops that are of economic significance on the farm. For SURE program purposes, a “farm” refers to all acreage in all counties that is planted or intended to be planted with crops by the producer, including all hay crops (with the exception of grazed acreage). Coverage must also be obtained for other crops for which crop insurance or NAP is available, including nursery, honey, aquaculture, and floriculture.

Congress envisioned that if a serious regional disaster was declared by USDA, then a farmer would be covered by a combination of crop insurance and SURE. When a producer buys higher crop insurance coverage levels, the SURE guarantee also increases. Unlike crop insurance, however, payments under SURE should not be expected until a year or more after the loss occurs.

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 claims are calculated is called an “insurance unit.” Unit types include basic, optional, and enterprise units. One farming operation may have several insurance units. In this situation, it is possible 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, many farmers prefer to divide their 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.

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 with whom you crop share rent. Each crop share landowner 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.

An enterprise unit combines all of the acres of a single 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. Since the enterprise units are usually larger than basic units or optional units, it is less likely that the average yield would be low enough to trigger a loss payment in a given year. Enterprise units are an option under CRC and must contain at least 50 acres. By selecting enterprise units you assume more risk, but it also reduces CRC premiums by about 50 percent, making it less costly than other insurance plans. Enterprise units are the only unit structure available under IIP.

Basic units may be divided into optional units when a crop is being grown under distinctly different production practices. For example, a grower with both irrigated and non-irrigated acres of the same

crop may qualify for optional units. Other special farming types or practices may also qualify acres to be insured as separate units. Optional units may also be established by FSA farm serial number or by section (one square mile blocks containing 640 acres) in areas surveyed under the U.S. Rectangular Survey System. New York is not surveyed into sections; however, optional units may be established in New York on a section equivalent basis for annual crops. Optional units based on section equivalents must be requested through a crop insurance agent, contain a block of land at least one mile square, and be clearly indicated on a map using identifiable boundaries. Separate APH records must be reported for each optional unit, or the grower would not receive the 10 percent premium discount allowed for basic units.

How crop insurance premiums are calculate.

Crop insurance premiums depend on your actual production history (APH yield), the coverage level you select, the price election you select, and the premium rate for your county. Based on the level of coverage and the crop being insured, you pay between 33 and 45 percent of the calculated premium, with the federal government paying the balance. If you use basic units rather than optional units, you are eligible for the additional 10 percent discount.

You can select a coverage level of 50, 55, 60, 65, 70, or 75 percent of your APH yield. In a sense, this 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, crop insurance would cover the difference. The level of coverage also affects the amount of protection that is available. Like other insurance, high levels of deductible have lower premiums, but also more risk. You also have some choice of the price election (percentage of the established crop price), depending on the yield guarantee selected. Selecting a lower level of price election lowers premiums slightly. In practice, however, most farmers select the 100 percent price election.

An important thing to remember about crop insurance premiums is that they are directly tied to the value of the crop they are insuring. If commodity prices increase, then crop insurance protection and premiums will also increase.

Table 1. Example of the cost of actual production history (APH) insurance for corn grain and gross returns under various yields (Livingston Co., 150 bu. APH yield, \$4.00 indemnity price, \$3.50 local cash price).

Type of coverage:	Level of crop insurance protection (1)								
	No Insurance	CAT	APH	APH	APH	APH	APH	APH	APH
Yield guarantee:	0%	50%	50%	55%	60%	65%	70%	75%	
Price guarantee:	0%	55%	100%	100%	100%	100%	100%	100%	100%
Producer premium (2):	n/a	\$0.00	\$6.80	\$8.64	\$9.95	\$13.04	\$15.88	\$21.24	
Application fee:	n/a	\$300	\$30	\$30	\$30	\$30	\$30	\$30	\$30
Actual yield (bu/A)	Gross return minus insurance cost (\$/acre)								
0	\$0	\$165	\$293	\$321	\$350	\$377	\$404	\$429	
20	\$70	\$191	\$283	\$311	\$340	\$367	\$394	\$419	
40	\$140	\$217	\$273	\$301	\$330	\$357	\$384	\$409	
60	\$210	\$243	\$263	\$291	\$320	\$347	\$374	\$399	
80	\$280	\$280	\$273	\$281	\$310	\$337	\$364	\$389	
100	\$350	\$350	\$343	\$341	\$340	\$337	\$354	\$379	
120	\$420	\$420	\$413	\$411	\$410	\$407	\$404	\$399	
140	\$490	\$490	\$483	\$481	\$480	\$477	\$474	\$469	
160	\$560	\$560	\$553	\$551	\$550	\$547	\$544	\$539	
180	\$630	\$630	\$623	\$621	\$620	\$617	\$614	\$609	
200	\$700	\$700	\$693	\$691	\$690	\$687	\$684	\$67	
Yield guarantee:	0	75	75	82.5	90	97.5	105	112.5	

- Notes:**
1. CAT: catastrophic crop insurance (APH); available at no premium cost to the producer (flat application fee of \$300/crop/county). APH: higher levels of APH insurance ("buy-up protection") available for additional premium (\$30/crop application fee).
 2. Producer premium takes into account only federal premium subsidies. Optional units are used for premium calculation. Selecting basic units would reduce premiums by 10%.

Comparing crop insurance alternatives for field crops

To demonstrate the different types of crop insurance coverage available to a field crop producer, a corn farmer with a 150-bushel APH yield in Livingston County will be used as an example. Gross returns for various levels of MPCl coverage (CAT and buy up levels of protection) versus having no insurance are compared in Table 1.

By comparing the various options you can see how farm cash flow is protected by using MPCl. In this example, CAT would pay the farmer \$165/A for a total crop loss. Buy-up coverage provides even more cash-flow protection for this farmer. A minimum cash flow of \$293 to \$429/A is guaranteed in exchange for a producer-paid premium of \$6.80 to \$21.24/A. As the level of crop insurance protection goes up, the grower is guaranteed a less-variable cash flow. The only advantage of having no crop insurance is saving the premium cost. Elimination of this cost would have a minor positive impact on cash flow during good years and a potentially disastrous impact on cash flow in a poor year.

This farmer also has the option of using a revenue-based insurance coverage like CRC or IIP. CRC and IIP are both products that use futures prices to set the value of the crop and pay for revenue losses (because of yield losses or price declines) rather than only yield losses as under APH. Gross returns for various levels

of CRC coverage versus having no insurance are compared in Table 2.

Under a CRC policy a minimum cash flow of \$293 to \$418/A is guaranteed in exchange for a farmer-paid premium of \$10.20 to \$36.48/A. As the level of CRC protection goes up, the farmer is guaranteed less-variable cash flows for any potential revenue combination when compared to either having no insurance or yield triggered APH coverage. In years when the harvest time CRC 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 \$4.04/\$3.75 harvest time price x 75 percent level = 81 percent loss trigger point (effective level of coverage)).

The only advantage of having no crop insurance is saving the premium cost. Elimination of this cost would have a minor positive impact on cash flow during good years and a potentially disastrous impact on cash flow in a poor year. Choosing a 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. Example of the cost of crop revenue coverage (CRC) insurance for corn grain and gross returns under various yields (Livingston Co., 150 bu. APH yield, \$4.04 early Chicago Board of Trade price, \$3.50 local cash price).

	Level of crop insurance protection (1)						
	No Insurance	CRC	CRC	CRC	CRC	CRC	CRC
Coverage level:	0%	50%	55%	60%	65%	70%	75%
Producer premium (2):	n/a	\$10.20	\$13.31	\$15.76	\$21.22	\$26.56	\$36.48
Application fee:	n/a	\$30	\$30	\$30	\$30	\$30	\$30
Actual yield (bu/A)	Gross return minus insurance cost (\$/acre)						
0	\$0	\$293	\$320	\$348	\$373	\$398	\$418
20	\$70	\$282	\$309	\$337	\$362	\$387	\$407
40	\$140	\$271	\$298	\$326	\$351	\$376	\$396
60	\$210	\$260	\$288	\$315	\$340	\$365	\$386
80	\$280	\$270	\$277	\$305	\$329	\$354	\$375
100	\$350	\$340	\$337	\$334	\$329	\$344	\$364
120	\$420	\$410	\$407	\$404	\$399	\$393	\$384
140	\$490	\$480	\$477	\$474	\$469	\$463	\$454
160	\$560	\$550	\$547	\$544	\$539	\$533	\$524
180	\$630	\$620	\$617	\$614	\$609	\$603	\$594
200	\$700	\$690	\$687	\$684	\$679	\$673	\$664
Revenue guarantee:	\$0	\$303	\$333	\$364	\$394	\$424	\$455

Notes:

1. CRC: crop revenue coverage (\$30/crop application fee).
2. Producer premium takes into account only federal premium subsidies. Optional units are used for premium calculation. Selecting basic units would reduce premiums by 10%. Selecting enterprise units would reduce premiums by about 50%.

Crop insurance for livestock producers

Crop insurance products have also been developed for farmers who produce forages for on-farm use. Policies are available in 52 counties for corn silage and in 8 counties for forage production and forage seeding. Coverage for corn silage and forage production (alfalfa and alfalfa mixtures) is available as APH insurance. Forage seeding (containing at least 50 percent approved legumes) is insured under the Dollar plan.

Corn silage and forage producers who want APH coverage will need to develop an APH yield and keep accurate farm management records on total acres and production. 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 suspect that you have a crop loss, notify your crop insurance agent immediately. A loss adjuster must assess damage before harvest or you must obtain advance permission from

your crop insurance agent to leave representative samples of the unharvested crop for inspection. This sample must be at least 10 feet wide and extend the entire length of each field in the insurance unit.

Corn silage crop insurance is available in the 52 New York counties with corn grain policies. Because livestock producers usually harvest both silage and grain, there is some flexibility in the program to allow for changes in harvest method. 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 be 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). Although 17 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.

APH-based forage crop insurance policies are available in only 8 counties and 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.

If you live in southern New York, the new pasture, rangeland, and forage (PRF) rainfall index group-risk policy may be a good choice for insuring your hay crops and pastures. Advantages of these policies include flexibility of when to insure during the year and how much to insure (producers are not required to insure all their acreage). They also allow the farmer to adjust coverage to better match the value of the crop and the productive capacity of the land.

Forage seeding policies are available in 8 counties and provide a dollar amount of insurance. Forage seeding policies are 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 is a new product available in every county in New York to help dairy producers manage their market risk. The livestock gross margin (LGM) for dairy product is designed to protect producers from unexpected declines in the market value of their milk minus feed costs. It uses adjusted futures prices to determine the difference between expected gross margin and the actual gross margin. Producers can purchase LGM dairy insurance monthly and have the option to buy protection for from 1 to 11 months.

Some important crop insurance equations:

APH Plan yield 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

APH Plan 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

CRC Plan revenue guarantees and premiums:

- Revenue guarantee = APH yield x coverage level x early CBOT 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

CRC Loss payments:

- If the late CBOT price is greater than the early CBOT price, the revenue is recalculated (no additional premium):
-Revenue guarantee = APH yield x coverage level x late CBOT price
- If actual yield is less than the yield guarantee:
-Loss payment = Revenue guarantee – actual revenue
- If actual revenue is equal to or greater than the revenue guarantee:
-Loss payment = 0

Dollar plan amount of coverage 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

IMPORTANT CROP INSURANCE DATES

Deadlines for sales closing, final planting date, acreage reporting, billing, and contract changes for New York crop insurance products are listed in Table 3. 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.
- **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.
- **End of insurance period**—date when crop insurance coverage ceases for the crop year.
- **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 due. Crop insurance premiums not due until after the cropping season is over and any losses have been paid.
- **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 3. Important deadlines for crop insurance in New York.

	Type of insurance*	Enrollment and policy change	Final planting	Acreage reporting	Billing date	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	GRP	11/30	--	11/30	10/1	
Apples	APH	11/20	--	1/31	9/15	11/5
Barley (winter)	APH	9/30	9/30	11/15	10/1	10/31
Cabbage	APH	3/15	5/31	6/5	10/1	11/25
Corn	APH	3/15	6/10	7/15	10/1	9/30***
Corn	CRC, IIP	3/15	6/10	7/15	10/1	12/10
Corn	GRP, GRIP	3/15	--	7/15	10/1	--
Dairy	LGM	monthly	--	--	at sign up	--
Dry Beans	APH	3/15	6/30	7/15	10/1	10/31
Forage Production	APH	9/30	--	11/15	7/1	10/15
Forage Seeding (fall)	DO	7/31	8/31	9/15	7/1	10/15***
Grain Sorghum	APH	3/15	6/20	7/15	10/1	12/10
Grapes	APH	11/20	--	1/31	9/15	11/20
Green Peas	APH	3/15	5/20	7/15	10/1	9/15
Nursery (field grown and container)	DO	5/1**	--	--	3/1	5/31
Oats (spring)	APH	3/15	5/10	6/15	10/1	10/31
Onions	APH	2/1	5/10	6/15	10/1	10/15
Pasture and Hayland	11/30	--	11/30	7/1	--	
Rainfall Index						
Peaches	APH	11/20	--	1/31	9/15	9/30
Potatoes	APH	3/15	5/30 or 6/10	7/15	10/1	10/31
Processing Beans	APH	3/15	7/25	7/31	10/1	9/30
Soybeans	APH, CRC	3/15	6/10	7/15	10/1	12/10
Sweet Corn (fresh-market)	DO	3/15	6/20 or 6/30	7/15	10/1	9/15 or 9/30
Sweet Corn (processing)	APH	3/15	6/20 or 6/30	7/15	10/1	9/20
Tomatoes	APH	3/15	6/5	7/15	10/1	10/10
Wheat	APH, CRC	9/30	10/10	11/15	10/1	10/31

* APH—actual production history insurance, with loss payment based on deviation from APH yield. Premiums vary with APH yield.

CRC—crop revenue coverage, loss payment based on lower than expected gross revenue.

IIP—indexed income protection, loss payment based on lower than expected gross revenue.

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

GRP—group risk plan. For corn and forage production, loss payments are based on relative county yield level and grower selected yield trigger.

For Apiculture and PRF policies, loss payments are based on an index of vegetative greenness and a grower selected coverage level, productivity factor trigger, and choices of when insurance protection is in force.

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

** For nursery crops the policy change date is 5/1, but insurance can be obtained at any time. Insurance attaches 30 days after enrollment.

***Multiple dates exist for this crop depending on the county. The earliest end of insurance period date is shown in the table.

Crop Insurance availability in New York, by county.

County	Adj. Gross Revenue (AGR)	Adj. Gross Revenue-Lite (AGR-L)	Apiculture (GRP)	Apples (APH)	Barley (APH)	Cabbage (APH)	Dry Beans (APH)	Corn (APH, CRC, IIP)	Corn (GRP, GRP)	Dairy (LGM)	Forage Production (APH)	Forage Seeding (DO)	Grain Sorghum (APH)	Grapes (APH)	Green Peas (APH)	Nursery (FG&C) (DO)	Oats (APH)	Onions (APH)	Pasture, Rangeland, Forage (GRP)	Peaches (APH)	Potatoes (APH)	Processing Beans (APH)	Soybeans (APH, CRC)	Sweet Corn, fresh-market (DO)	Sweet Corn, processing (APH)	Tomatoes (APH)	Wheat (APH, CRC)	
Albany		X	X	X			X		X						X									X				
Allegany		X	X		X			X		X					X	X	X			X			X	X	X			X
Bronx			X							X					X													
Broome		X	X	X				X		X			X		X	X			X					X				X
Cattaraugus		X	X	X		X		X	X	X	X	X	X		X	X	X			X			X	X	X			X
Cayuga	X	X	X	X	X		X	X	X	X					X	X	X	X				X	X	X	X	X		X
Chautauqua	X	X	X		X			X	X	X			X	X		X	X			X				X	X	X	X	X
Chemung		X	X					X		X					X	X				X					X	X	X	
Chenango		X	X					X		X					X	X				X					X			
Clinton		X	X	X				X		X					X	X									X			
Columbia		X	X	X				X	X	X					X	X				X					X			X
Cortland		X	X		X			X	X	X					X	X				X				X	X			
Delaware		X	X					X		X					X	X				X					X			
Dutchess		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
Essex		X	X	X				X		X					X	X									X			
Franklin		X	X					X		X					X	X						X			X			
Fulton		X	X	X				X		X					X	X									X			
Genesee	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			
Hamilton			X							X					X													
Herkimer		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
Kings			X							X					X													
Lewis		X	X					X		X					X	X									X			
Livingston		X	X				X	X	X	X	X		X		X	X	X					X	X	X	X	X	X	X
Madison		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
Montgomery		X	X	X				X	X	X			X		X	X	X							X	X			X
Nassau			X							X					X													
New York			X							X					X													
Niagara	X	X	X	X	X			X	X	X				X	X	X	X				X			X	X	X	X	X
Oneida		X	X	X				X	X	X			X		X	X	X					X	X	X	X			X
Onondaga	X	X	X	X				X	X	X					X	X	X							X	X			X
Ontario	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X				X	X	X	X	X		X
Orange	X	X	X	X				X		X	X	X			X	X	X								X			
Orleans	X	X	X	X		X	X	X	X	X			X		X	X	X	X			X	X	X	X	X	X		X
Oswego	X	X	X	X				X	X	X					X	X	X					X	X	X	X	X		X
Otsego		X	X					X	X	X		X	X		X	X									X			
Putnam			X							X					X													
Queens			X							X					X													
Rensselaer		X	X	X				X	X	X			X		X	X									X			
Richmond			X							X					X													
Rockland			X	X						X					X						X				X			
St. Lawrence		X	X					X	X	X	X	X			X	X									X			
Saratoga		X	X	X				X		X			X		X	X									X			
Schenectady		X	X					X		X					X										X			
Schoharie		X	X	X				X		X					X	X				X				X	X			
Schuyler		X	X	X			X	X		X			X	X	X	X	X							X	X	X	X	X
Seneca	X	X	X		X		X	X	X	X			X	X	X	X	X	X						X	X	X		X
Steuben		X	X	X		X		X	X	X				X	X	X	X	X					X	X	X	X	X	X
Suffolk	X	X	X	X				X		X			X		X	X								X	X			X
Sullivan		X	X					X		X					X										X			
Tioga		X	X		X			X		X					X	X									X			
Tompkins		X	X				X	X	X	X					X	X	X						X	X	X			X
Ulster	X	X	X	X				X		X			X	X	X					X	X				X			
Warren		X	X					X		X					X										X			
Washington		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
Westchester			X							X					X										X			
Wyoming		X	X				X	X	X	X			X		X	X	X					X	X	X	X	X		X
Yates	X	X	X				X	X	X	X				X	X	X	X	X					X	X	X	X	X	X
Total counties	16	52	62	25	15	3	13	52	30	62	8	8	17	11	17	62	46	12	15	6	15	18	24	54	11	6	27	



New York State Department
of Agriculture & Markets
10B Airline Drive
Albany, NY 12235



NYS Department of
Agriculture and Markets

10B Airline Drive
Albany, NY 12235
800-554-4501

<http://www.agmkt.state.ny.us/AP/CropInsurance.html>



Risk Management Agency,
US Department of Agriculture
<http://www.rma.usda.gov>

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

New York State Department of
Agriculture and Markets
<http://www.agmkt.state.ny.us/>

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

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 for the
New York State Department of Agriculture and Markets
in conjunction with the USDA Risk Management Agency