

Marine Extension Bulletin

November 2004



Woods Hole Oceanographic Institution Sea Grant Program
Cape Cod Cooperative Extension



Important Changes to the Federal Crop Insurance Program for Quahog Farmers

In the fall of 1999, the United States Department of Agriculture (USDA) Risk Management Agency (RMA) launched a pilot crop insurance program for quahog (hard shell clam) farmers. The program was open to quahog farmers in select counties in Massachusetts, Virginia, South Carolina, and Florida. Under this pilot program, quahog growers could insure a portion of their clam crops under the Federal Crop Insurance Corporation (FCIC), just as farmers of barley, peanuts, wheat, and other crops do.

Although participation in the program was good initially, farmers discovered a flaw in the pilot insurance program; farmers complained that losses were measured from their total inventory. In practice, however, most losses tend to be associated with a single year class. The pilot program's loss calculation method prevented a number of farmers from collecting

payments, despite heavy losses in one year's crop.

In response to the concerns expressed by quahog farmers, RMA made significant changes to the pilot program. Specifically, the program now recognizes two types, or stages, of quahogs, and losses are calculated and insured for each of these stages. Grower feedback also convinced RMA that stages should be defined based on quahog age. For example, Stage 2 clams are defined as clams seeded after July 15th of the most recent crop year and including clams seeded in the current year. Stage 3 clams are defined as those seeded before July 16th of the most recent crop year. This change has a dramatic effect on the ability of quahog farmers to collect in the event of loss (*see Scenarios, below*) and should prompt growers to reconsider their crop insurance coverage **prior to the annual sales closing date of November 30th.**



Photo by Mark Begley

Ice poses a threat to clam farmers.

Scenario Assumptions

To illustrate the differences between the old and new pilot programs, two scenarios have been created. For both scenarios, a small clam farm in Massachusetts will serve as the basis for comparison. The farmer plants 100,000 clams each year, beginning in 2002:

Year Planted	Number of Clams Planted	Clam Stage
2002	100,000	Stage 3
2003	100,000	Stage 3
2004*	100,000	Stage 2
* planted after July 15th		

Based on advice from quahog farmers, a 60% survival rate is assumed by the insurers. This means that the program expects a farmer typically to lose 40% of each crop and these clams are not insurable. The value of the clams is set for each state's farmers; currently in Massachusetts, Stage 3 clams are worth \$0.18 each and Stage 2 clams are worth \$0.09 each. Under the old program, all clams were valued at \$0.18 each.

NOTE: Though crop values may differ for farmers in other states, and quantities planted will vary, the *payment patterns* in the following scenarios would still apply.

Scenario One: Seed Die-Off

In the spring of 2005, the farmer discovers that the seed (Stage 2 clams) had low survival rates due to winter cold temperatures. An insurance adjuster comes out and determines

that only 10,000 of the Stage 2 clams have survived. The adults (Stage 3 clams) were unaffected. The farmer had selected the 65 percent coverage level.

Old program

- The market value of the farm's crop prior to any loss would have been (60 % survival rate x 300,000 clams x \$0.18/clam) or \$32,400.

- The market value of the farm's crop after the loss would be (130,000 clams x \$0.18/clam) or \$23,400. [10,000 Stage 2 clams @ \$.18 each, plus 120,000 stage 3 clams (60% survival for the 200,000 Stage 3 clams) @ \$.18 each]

- The loss, therefore, would be calculated as the market value prior to the loss (\$32,400), minus the market value after the loss (\$23,400), or \$9,000.

- At a 65 percent coverage level, the farmer's deductible would be (35% x \$32,400) or \$11,970. Since the deductible exceeds the loss, **no payment would have been made.**

New program

- The market value of the farm's Stage 2 crop prior to any loss would have been (60 % survival rate x 100,000 clams x \$0.09/clam) or \$5,400.

- The market value of the farm's Stage 2 crop after the loss would be (10,000 clams x \$0.09/clam) or \$900.

- The loss, therefore, would be \$4,500.

- At a 65 percent coverage level, the farmer's deductible would be (35% x \$5,400) or \$1,890. The farmer, therefore, would have received the difference between the loss (\$4,500) and the deductible (\$1,890), or **\$2,610.**



Farmers pin down a net over their quahog seed as the tide starts coming in.

Scenario Two: Adult Die-Off

In the summer of 2005, the older quahogs (Stage 3 clams) are affected by a QPX outbreak. Once the disease has run its course, an insurance adjuster comes out and determines that only 40,000 of the Stage 3 clams have survived. The seed (Stage 2 clams) were unaffected. The farmer had selected the 55 percent coverage level.

Old program

- The market value of the farm's crop prior to any loss would have been (60 % survival rate x 300,000 clams x \$0.18/clam) or \$32,400.
- The market value of the farm's crop after the loss would be (100,000 clams x \$0.18/clam) or \$18,000. [40,000 Stage 3 clams @ \$.18 each, plus 60,000 Stage 2 clams (60 percent survival for the 100,000 Stage 2 clams) @\$.18 each]
- The loss, therefore, would be calculated as the market value prior to the loss (\$32,400), minus the market value after the loss (\$18,000), or \$14,400.
- At a 55 percent coverage level, the farmer's deductible would be (45% x \$32,400) or \$14,580. Since the deductible exceeds the loss, **no payment would have been made.**

New program

- The market value of the farm's Stage 3 crop prior to any loss would have been (60 % survival rate x 200,000 clams x \$0.18/clam) or \$21,600.
 - The market value of the farm's Stage 3 crop after the loss would be (40,000 clams x \$0.18/clam) or \$7,200.
 - The loss, therefore, would be calculated as the market value prior to the loss (\$21,600), minus the market value after the loss (\$7,200), or \$14,400.
- At a 55 percent coverage level, the farmer's deductible would be (45% x \$21,600) or \$9,720. The farmer, therefore, would have received the difference between the loss (\$14,400) and the deductible (\$9,720), or **\$4,680.**

Scenario Three: Mass Die-Off

In the spring of 2005, the farmer finds that ice has inflicted serious mortality on all the clams, regardless of size. An insurance adjuster comes out and determines that only 30,000 clams survived, of which 10,000 are seed (Stage 2 clams). The farmer had opted for the 50 percent coverage level.

Old program

- The market value of the farm's crop prior to any loss would have been (60 % survival rate x 300,000 clams x \$0.18/clam) or \$32,400.
- The market value of the farm's crop after the loss would be (30,000 clams x \$0.18/clam) or \$5,400.
- The loss, therefore, would be calculated as the market value prior to the loss (\$32,400), minus the market value after the loss (\$5,400), or \$27,000.
- At a 50 percent coverage level, the farmer's deductible would be (50% x \$32,400) or \$16,200. The farmer, therefore, would have received the difference between the loss (\$27,000) and the deductible (\$16,200), or **\$10,800.**

New program

- The market value of the farm's **Stage 2 crop** prior to any loss would have been (60 % survival rate x 100,000 clams x \$0.09/clam) or \$5,400.
- The market value of the farm's **Stage 2 crop** after the loss would be (10,000 clams x \$0.09/clam) or \$900.
- The Stage 2 loss, therefore, would be calculated as the market value prior to the loss (\$5,400), minus the market value after the loss (\$900), or \$4,500.
- At a 50 percent coverage level, the farmer's deductible would be (50% x \$5,400) or \$2,700.
- The market value of the farm's **Stage 3 crop** prior to any loss would have been (60 % survival rate x 200,000 clams x \$0.18/clam) or \$21,600.
- The market value of the farm's **Stage 3 crop** after the loss would be (20,000 clams x \$0.18/clam) or \$3,600.
- The Stage 3 loss, therefore, would be calculated as the market value prior to the loss (\$21,600), minus the market value after the loss (\$3,600), or \$18,000.
- At a 50 percent coverage level, the farmer's deductible would be (50% x \$21,600) or \$10,800.
- At a 50 percent coverage level, the farmer, therefore, would have received the difference between the Stage 2 loss (\$4,500) and the deductible (\$2,700), or \$1,800 for the Stage 2 losses, plus the difference between the Stage 3 loss (\$18,000) and the deductible (\$10,800), or \$7,200, for a total payment of **\$9,000.**

As illustrated by the scenarios and in Table 1 (showing the highest and lowest coverage levels offered), the new program significantly improves the potential for payments to farmers in

Table 1 Scenario	50% Coverage Level		75% Coverage Level	
	Insurance payment under old program	Insurance payment under new program	Insurance payment under old program	Insurance payment under new program
Seed (Stage 2 clams) Die-Off	0	\$1,800	0	\$3,150
Adult (Stage 3 clams) Die-Off	0	\$3,600	\$6,300	\$9,000
Mass Die-Off	\$10,800	\$9,000	\$18,900	\$15,750

instances where mortality is concentrated on one stage.

Although there is a slight decrease in payments made in cases of mass mortality (all stages), this was not reported as a common occurrence by growers.

Who Does the Pilot Program Serve?

• The pilot Federal Crop Insurance Program for Quahog Farmers is available only to clam farmers in the following states and counties:

Massachusetts	Barnstable, Bristol, Dukes, Nantucket, and Plymouth Counties
Virginia	Accomack and Northampton Counties
South Carolina	Beaufort and Charleston Counties
Florida	Brevard, Dixie, Indian River, and Levy Counties

- The insurance only covers clams planted within those counties that are at least 10 mm in size.
- Insured clams are covered for mortality caused by oxygen depletion, disease, freezing, hurricanes, decreases in salinity, tidal waves, storm surges, and ice floes.
- Coverage begins in December of the year of application and ends November 30th of the following year (or when the total indemnity equals the amount of insurance, in case of loss).
- Clams may not be planted at a density of more than 90 per square foot.
- Clams that remain on the licensed farm site for extended periods of time (e.g., 4 years after seeding in Massachusetts) are not eligible for coverage.

How Does the Pilot Insurance Program Work?

When considering coverage, the farmer must select the coverage level and premium level that is appropriate to their business. Coverage levels range from 50–75 percent (i.e., the percentage of the crop that is insured). While the insurance premiums are subsidized, this subsidy decreases with increasing coverage level. Alternatively, farmers may choose catastrophic coverage, where the premiums are fully subsidized (there is

a \$100 administrative fee). With catastrophic coverage, the farmer has a 50 percent coverage level but would receive only 55 percent of the established price per clam.

The insured farmer must purchase the insurance and submit an inventory report declaring the dollar value of the insurable clams by the closing date. For the 2005 growing season, the closing date is November 30th, 2004. Premiums depend on coverage level and the number of clams insured. Currently, for every 100,000 clams planted in a year, a farmer can expect to pay premiums and fees of approximately \$110 for 50 percent coverage to \$490 for 75% coverage.

In the event of a loss, the quahog farmer must notify their agent within 72 hours of the initial discovery of the damage. Also, the farmer must obtain written permission prior to any change in care or maintenance of the clams.

Once a loss is reported, an insurance adjuster will inspect the site and determine the cause(s) and degree of loss. If the insurance company deems the losses valid and sufficient, indemnity payments will be made.

Resources

Up-to-date program and actuarial data is available on the RMA website (www.rma.usda.gov). For information about insurance products available, contact a local crop insurance agent (www3.rma.usda.gov/apps/agents) or one of the insurance companies that sell and service crop insurance policies. RMA has 10 regional offices in various locations across the country (www.rma.usda.gov/aboutrma/fields/rsos.html) that may provide information specific to your area. Local crop insurance agents can best describe the different insurance products, policy rates and terms.

This document, a collaboration of the Woods Hole Oceanographic Institution Sea Grant Program, Barnstable County's Cape Cod Cooperative Extension, and the USDA Risk Management Agency, should be cited as follows: *Marine Extension Bulletin: Important Changes to the Federal Crop Insurance Program for Quahog Farmers*, by W. Walton and J. Gallons.



This bulletin points out features of the pilot crop insurance program and is not intended to be comprehensive. The information presented neither modifies nor replaces terms and conditions of the basic policy, the crop provisions, or the County Actuarial Documents. For further information and an evaluation of your risk management needs contact a Crop Insurance Agent for further details. The publication and distribution of this bulletin was supported in part by the USDA Risk Management Agency.