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Risk Management
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Actuarial and
Product Design
Division

FCIC-24100 (08-2011)

CULTIVATED CLAM PILOT CROP INSURANCE UNDERWRITING GUIDE

2012 and Succeeding Crop Years

Underwriting Guide for Catastrophic (CAT), and Additional
Coverage Cultivated Clam Crop Insurance Contracts

UNITED STATES DEPARTMENT OF AGRICULTURE
WASHINGTON, D.C. 20250

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SUBJECT:	OPI: Actuarial and Product Design Division
Provides the underwriting instructions for the cultivated clam pilot insurance program.	APPROVED: August 24, 2011 <i>/s/ Tim B. Witt</i> Deputy Administrator for Product Management

REASON FOR ISSUANCE

THIS HANDBOOK IS BEING ISSUED TO PROVIDE PROCEDURES AND INSTRUCTIONS FOR ADMINISTERING THE CULTIVATED CLAM CROP INSURANCE PROGRAM FOR THE 2012 AND SUBSEQUENT CROP YEARS.

THIS HANDBOOK CONTAINS THE OFFICIAL FCIC-ISSUED UNDERWRITING INSTRUCTIONS UNDER THE CULTIVATED CLAM PILOT CROP PROVISIONS **2012-0116 (Rev. 08-11)** FOR THE **2012** AND SUCCEEDING CROP YEARS.

THE INSTRUCTIONS IN THIS HANDBOOK ARE EFFECTIVE UPON ISSUANCE AND ARE NOT RETROACTIVE TO ANY PREVIOUS CROP YEAR DETERMINATIONS.

IN THE ABSENCE OF INDUSTRY-DEVELOPED, FCIC-APPROVED PROCEDURE FOR THIS CROP FOR **2012** AND SUCCEEDING CROP YEARS, ALL REINSURED COMPANIES WILL UTILIZE THESE STANDARDS FOR BOTH UNDERWRITING AND TRAINING.

DISTRIBUTION: RMA Deputy Administrators, Directors, Washington D.C. and Kansas City; RMA Regional Service and Risk Compliance Offices; National Appeals Division (NAD); Approved Insurance Providers, and National Crop Insurance Services (NCIS)

CULTIVATED CLAM PILOT CROP INSURANCE UNDERWRITING GUIDE

SUMMARY OF CHANGES/CONTROL CHART

The following list contains significant changes to this handbook, as determined by us. It may not represent all changes made. All changes made to this handbook are applicable regardless of whether or not listed.

Major Changes: See changes or additions in text, which have been highlighted. Three stars (***) identify information that has been removed.

Significant changes for crop year 2012 issued August 2011:

1. Performed general edits throughout handbook.
2. Section 2, changed the references to the Crop Insurance Handbook (CIH) to correspond to the current handbook.
3. Inserted new subsections 16.G “Selecting Samples for the Inspections” and 16.H “Procedures for Conducting the Inspections” under Section 16 “Conditions of Acceptance.”
4. Renumbered Section 16.G “As a Result of Any Inspection” to Section 16.I.

Control Chart For: Cultivated Clam Pilot Underwriting Guide					
	SC Page(s)	TC Page(s)	Text Page(s)	Date	Directive Number
Remove	Entire Handbook				
Current Index	1-2	1-3	1-41	08-2011	FCIC-24100-(08-2011)

This is only an abbreviated summary of the major changes. It is advised that you review the entire handbook carefully.

CULTIVATED CLAM PILOT CROP INSURANCE

UNDERWRITING GUIDE

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1. PURPOSE AND OBJECTIVE

To provide clarification and supplementary instructions for establishing cultivated clam crop insurance coverage in accordance with the Cultivated Clam Pilot Crop Insurance Provisions (2008-0116 Rev. 08-07) and the Cultivated Clam Pilot Loss Adjustment Handbook (FCIC-25800).

If an error is found, notify us in writing at the above address. Outline the error and indicate the proposed correction. Errors may be corrected for the current crop year. Proposed changes should be submitted in writing through your proper organizational channels to the Product Administration and Standards Division for consideration.

In the course of delivering cultivated clam crop insurance, Approved Insurance Providers (AIPs) may develop forms based on their internal needs. The forms must be developed according to RMA's approved standards contained in this handbook or as specified in the FCIC 24040, Document and Supplemental Standards Handbook (DSSH), and provide all required information. Standards and examples contained in this handbook do not contain required statements. Refer to the FCIC 24040 to determine the applicable statements to be included on each form. The Collection of Information and Data (Privacy Act) Statement and the Nondiscrimination Statement must be included on any form the producer signs or provided to the producer on a separate form, for each form that is signed by the producer. A copy must be maintained by the AIP. The Certification Statement must be included on any form that the insured signs that collects information from the producer.

2. GENERAL RULES

In general, the FCIC 18010 Crop Insurance Handbook (CIH) applies to Cultivated Clams. Exceptions, changes, and additions are referenced in this supplement.

Cultivated Clams are a category D, Aquaculture Dollar Plan Crop (Plan Code 43). The terminology and instructions contained in the CIH Sections **1 - 6, 8, 13, 14, and 20** that apply to the completion of forms and responsibilities of the Approved Insurance Provider (AIP) and the insured apply to the Cultivated Clam Program.

3. CANCELLATION

- A. **EFFECTIVE DATE**: Upon approval.
- B. **REPLACES**: This handbook replaces Cultivated Clam Pilot Crop Insurance Underwriting Guide FCIC-24100 **(08-2010)** dated **August 28, 2007**.

4. BACKGROUND INFORMATION ON THE INSURABLE CROP

The hard-shell clam, *Mercenaria mercenaria*, belongs to the class Bivalvia, easily identifiable

by two, somewhat rounded, hinged shells that make up the two halves, or valves, a protruding burrowing foot, and the purple or dark blue border found on the inside of the shell. A chestnut brown zigzag line on the outside of the shell distinguishes it. Some cultivators prefer this variant because of its faster growth rate and natural identifiability. All bivalve mollusks are filter feeders, extracting their food from the surrounding water. The quahog spends most of its life (which can last for up to 20 years) buried into the sediments of the subtidal and lower intertidal zone, with its two siphons reaching just above the surface to feed and discharge wastes. It feeds by filtering phytoplankton from water that it pulls in over its gills with one siphon and then pumps it back out through the other.

In much of the U. S., hard-shell clams are called quahogs. Still, other names are based on a quahog's commercial size. Until the clams reach a legally marketable size, they are referred to as seed. As the clams become marketable, they are referred to as the littleneck, (48mm valve length or 1.5 inches), the cherrystone, (60mm valve length or 2 inches), and the chowder, (greater than 75mm, 3 inches or more). The production of a legally marketable size quahog can take from 15 months in the warm Southern waters, to 4 years in the cooler Northern waters. A quahog's age can be determined by counting the growth rings on its shell. Quahogs grow more slowly as they age and as a result the growth rings are closer together and difficult to count accurately.

Quahogs prefer ocean water with salinity between 18 and 26 parts per thousand. This is less salty than the open ocean where the salinity is about 35 parts per thousand.

Shellfish aquaculture techniques are designed to reduce losses by protecting shellfish at early, vulnerable stages from predation and other adverse natural phenomena as long as economically feasible. Cultivated quahogs are commonly cultured using a variety of cultural techniques including bottom planting, mesh bags, or trays.

A. SHELLFISH CULTURE

- (1) **In or On Bottom:** If the substratum or ocean bottom will support or is of a consistency that allows clams to burrow, then shellfish seed can be stocked directly on the bottom. Clam seed are routinely planted at eighty per square foot, depending on the site. Proper and frequent maintenance is essential for commercial success of a bottom culture system. Light plastic or nylon netting is commonly installed over the clams after they are planted to control predation by crabs, drills (a type of snail), or rays. Nets used to control predators are monitored and cleaned on a regular basis to eliminate entrapped predators, repair holes, and remove fouling organisms.
- (2) **Near Bottom Culture:** Cages and boxes of plastic mesh are used to culture clams just off the bottom. These enclosures may be purchased from commercial suppliers or built by the culturist. Shellfish seed is put in the mesh bags or plastic boxes and sometimes placed on a rack. As the seed grows, it is transferred to enclosures with increasingly larger mesh. A larger mesh provides better water flow, which delivers more food and oxygen, while removing waste.

Most prefabricated units are about five square feet, but units over 30 square feet have been used. Units can be used in the nursery phase; however, clams must

be transferred to the bottom after they reach 20 millimeters in size for growout to market size.

- (3) **Surface Systems**: At some locations, small mesh containers have been used to float shellfish seed near the warmer, surface waters. Phytoplankton, microscopic plants that float in the water and are eaten by shellfish are more abundant in shallow waters and water flow is usually greater. Surface culture is normally used in the nursery phase of shellfish culture and is occasionally used for final growout.

(B) **TYPICAL CLAM CULTURE**

- (1) **Production of Seed**: Very small clams (3 - 5 mm) are obtained from hatcheries (or other sources, including natural collection) where clams are cultured from initial spawning through the larval metamorphosis to the juvenile stage. Once juveniles reach the size of 5mm, they can be marketed as "seed," although the preference is for seed greater than 8 mm, which better resist predation.
- (2) **Field Planting**: The seed are "planted" in net-covered boxes measuring approximately 4 feet x 8 feet x 6 inches, that are filled with "clean" sand (sand that does not contain predator species; i.e. green crabs), and are slightly elevated above the intertidal flats on legs. These boxes, known as "nursery boxes" or "cages", may contain up to 10,000 seed clams. Smaller, more manageable boxes sized 4'x 4' are being used more commonly.
- (3) **Growout**: The seed is allowed to remain in the nursery trays until a size of 10 - 15mm. However, all clams between 19 and 176 mm are considered field plant size by the industry. At this point, they are transferred to narrow, net-covered plots ("pens") for grow out. When the clams reach 51 – 63 mm (2 - 2.5 inches), they are harvested.

5. **DEFINITIONS**

- A. Terms, abbreviations, and definitions **general** (not crop-specific) to underwriting are identified in the CIH.
- B. Terms, abbreviations, and definitions **specific** to cultivated clams and this handbook, which are not defined in this section, are defined as they appear in the text.

ADM - Actuarial Data Master

Amount of insurance - For each basic unit, the insured's inventory value multiplied by the coverage level percentage the insured elect's, and multiplied by the insured's share. However, for catastrophic risk protection policies, amount of insurance is the insured's inventory value multiplied by the coverage level percentage (for CAT coverage the level is limited to 50%), multiplied by the insured's share, and multiplied by 55 percent. The insured's accumulated paid indemnities during the crop year for each basic or optional unit may not exceed the

insured's amount of insurance.

Basic unit value before loss - The stage value of all undamaged insurable clams, in the basic unit or, if elected, all optional units combined, immediately prior to the occurrence of any loss as determined by our appraisal. This allows the amount of insurance under the policy to be prorated among the individual units based on the actual value of the clams in the unit at the time of loss. It is also the basis for determining whether or not an indemnity is due. This value is used to ensure that you have not under-reported your clam inventory value.

Crop year deductible - The deductible percentage multiplied by the sum of the inventory values within each basic unit. The crop year deductible will be increased for any increases in the inventory value on the inventory value report. The crop year deductible will be reduced by any previously incurred deductible if the insured timely reports each loss to the AIP.

Deductible percentage - An amount equal to 100 percent minus the percent of coverage the insured selects. The percentage is 50 percent for catastrophic risk protection coverage.

Disease - Any pathogen or group of pathogens, parasitic infestation or plague verified by an aquaculture pathologist and shown to be a primary cause to the death of the insured clams.

Freeze - The formation of ice in the cells of the animal caused by low air temperatures.

Global Positioning System (GPS) - A space based radio position, navigation and time transfer system involving satellites and computers to determine the latitude and longitude of a receiver on Earth by computing the time difference for signals from different satellites to reach the receiver.

Growing location - A lease parcel, permit or licensed area, whose boundaries are readily discernable above the water, and identified on a map that shows enough detail to distinguish seeded areas within the site.

Growout bag - A mesh bag used throughout the growing season to contain clams when placed in the appropriate growing medium and as further defined by the Special Provisions.

Harvest - Removal of marketable clams from the unit. Clams that are removed from the growing location but not of sufficient size to be marketable are not considered harvested if returned to the growing location.

Ice floe - Floating ice formed in sheets on the sea surface.

Inventory value - The total of the stage values from the inventory value report.

Inventory value report - The insured's report that declares the stage values of insurable clams in accordance with section 6 of the Crop Provisions.

Land - The land under a body of water suitable for planting clams and the column of water above the land if designated and controlled by state law.

Lease - A contract that grants use of land in or assigned to a county for a specified term and for

a specified payment and provides the lessee with the exclusive use of the land to plant clams.

Lease parcel - A legally identifiable tract or plot of land covered by a lease, permit, or license.

License - Official or legal permission that grants use of land in or assigned to a county for a specified term and provides the licensee with the exclusive use of the land to plant clams.

Non-contiguous - In lieu of the definition in the Basic Provisions, separately-named, high-density aquaculture lease sites or shellfish sites are considered non-contiguous, unless limited by the Special Provisions. Individual land parcels within such sites are not considered non-contiguous.

Occurrence deductible -

- (a) This deductible allows a smaller deductible than the crop year deductible to be used when:
 - (1) Inventory values are less than the reported basic unit value; or
 - (2) You have elected optional units, if applicable.
- (b) The occurrence deductible is the lesser of:
 - (1) The deductible percentage multiplied by the unit value before loss multiplied by the under-report factor; or
 - (2) The crop year deductible.

Permit - A document giving official or legal permission to use land in or assigned to a county for a specified term and provides the permittee with the exclusive use of the land to plant clams.

Planting - The placing of seed clams into the appropriate growing medium for the practice specified.

Pollution - The presence in the water of a substance that directly causes death of the clams. The substance shall not be parasitical, bacterial, fungal or viral, or any substance used by the insured for medicinal purposes. Pollution will also include any increase or decrease in the content of any normal soluble or insoluble constituent of water including mud and silt, feed residues, solid or liquid fish wastes, dissolved gases and any other substance normally present in the water of the lease parcel.

Practical to replant - In lieu of the definition of "Practical to replant" contained in section 1 of the Basic Provisions, unless limited by the Special Provisions, practical to replant is defined as our determination, after loss or damage to the insured crop, based on factors including, but not limited to the causes of loss listed in section 10 of the crop provisions, that replanting the insured crop will allow the crop to develop normally during the remainder of the crop year. Unavailability of seed clams will not be considered a valid reason for failure to replant.

Practice - Cultural methods of producing clams such as trays, mesh bags, round pens, lantern nets or bottom planting.

Replant - Unless limited by the Special Provisions, replanting means performing the cultural practices necessary to prepare for replacement of insured clams that were destroyed by an insurable cause of loss and then placing living insurable clams into mesh bags or pens, or seeding them into prepared growout beds, bottom culture, bottom trays, or floating trays on

insurable acreage.

Salinity - The dissolved solids (typically salts such as chloride, sodium, and potassium) in ocean water expressed as parts per thousand.

Seed clam -

- (a) For clams placed in a field nursery or a nursery bag - a clam that is a minimum of 5 millimeters, measured at the longest shell distance that is parallel to the hinge.
- (b) For all others - a clam which is a minimum of 10 millimeters, measured at the longest shell distance that is parallel to the hinge.

Separately named high-density aquaculture lease site - The submerged subdivided land under a body of water suitable for the cultivation of clams and identified and named separately by the Division of Marine Resources or similar regulatory agency.

Shellfish harvest ban - A State or Federal order that prohibits harvesting clams for human food in areas where monitoring program data indicates that fecal material, pathogenic microorganisms, poisonous or deleterious substances, marine toxins, or radio nuclides have reached excessive concentrations.

Stage - Clams that have attained the size or age specified for stage 1, 2, 3, or 4 as defined in the Special Provisions.

Stage value - The dollar value of the inventory of all insurable clams at each stage based on the survival factors and the prices shown in the actuarial documents for such stages, in each unit on your inventory value report, including any revision that increases the value of your insurable inventory.

Storm surge - A significant increase or decrease in water depth relative to normal tides that is caused by a strong, continuous and prolonged strong flow of onshore or offshore winds.

Survival factor - A factor shown on the actuarial documents that represents the expected percentage of clams that will normally survive. If you provide production records for three consecutive years, your records will be used in lieu of the factor contained in the actuarial document to determine the survival factor.

Tidal wave - A large water wave, wave train, or a series of waves, generated in a body of water by an impulsive disturbance that vertically displaces the water column or a destructive type of wave motion in seas and oceans, associated either with strong winds or underwater earthquakes.

Under-report factor - The factor that adjusts the insured's indemnity for under-reporting of inventory values. The factor is always used in determining any indemnities. The under-report factor is the lesser of: a) 1.000 or; b) the sum of all stage values reported on all the inventory value reports, minus the total of all previous losses, as adjusted by any previous under-reporting factors, divided by the basic unit value before loss.

Unit value after loss - The value of the remaining insurable clams in each basic or optional

unit based on the percentage of the maximum reference price contained in the actuarial materials, immediately following the occurrence of a loss as determined by our appraisal, plus any reduction in value due to uninsured causes. This is used to determine the loss of value for each individual unit so that losses can be paid on an individual unit basis, optional or basic, as applicable

The survival factor is applied at the time of inventory and **not** applied a second time to the same inventory when a loss occurs. Clams that are seeded subsequent to the annual inventory report must be adjusted by the survival factor.

Unit value before loss - The stage value of undamaged insurable clams in the basic or optional unit, as applicable, immediately prior to the loss occurrence. The determined value will include the number and stages that existed on the date of the inventory value report, adjusted for changes, including but not limited to, seeded and harvested; the prices contained in the actuarial materials; and the applicable survival factors. This allows the amount of insurance under the policy to be divided among the individual units in accordance with the value of the clams in the unit at the time of loss for determining whether the insured is entitled to an indemnity for insured losses in the unit, optional or basic, as applicable. Clams that are seeded subsequent to the annual inventory report must be adjusted by the survival factor before they are added to the beginning inventory during the process of establishing the "Unit value before loss."

6. AVAILABILITY

The Cultivated Clam Pilot Crop Insurance Program is available to all persons operating a cultivated clam farming operation in the designated pilot areas that produce and market cultivated clams in accordance with the common crop insurance policy, pilot cultivated clam crop provisions, and Special Provisions of Insurance.

The pilot areas include clam producers in Brevard, Dixie, Indian River, and Levy Counties, Florida; Barnstable, Bristol, Dukes, Nantucket, and Plymouth Counties, Massachusetts; Beaufort and Charleston County, South Carolina; and Accomack and Northampton Counties, Virginia.

7. IMPORTANT DATES

- A. **CONTRACT CHANGE DATE** - August 31, preceding the crop year.
- B. **CANCELLATION, TERMINATION, AND SALES CLOSING DATE** - November 30.

- C. **CLAM INVENTORY REPORTING DATE AND INSURANCE ATTACHMENT DATE:**
- (1) **New applications** - On December 1, when the application and the inventory value report are submitted by October 30;

On the 31st day following the date of submission for new applications, when the Application and the inventory value report are submitted between November 1 and 30;

- (2) **Carryover Insureds** - On December 1 for policies continued from the prior year if the inventory value report is submitted by October 30; or

On the 31st day following the date of submission of the inventory value report for policies continued from the prior year when the inventory value report is submitted between November 1 and 30. No application or inventory value reports, except revisions, will be accepted after November 30.

D. PREMIUM BILLING DATE - October 1. Includes:

(1) **Premium based on:**

- (a) The Clam Inventory Value Report - may be prorated the first year.
- (b) A revised Clam Inventory Value Report - will be prorated from the starting month to end of crop year.
- (c) In accordance with section 7(c) of the Cultivated Clam Pilot Crop Provisions, if premium is prorated, premium will be charged for the entire month for any calendar month during which any amount of coverage is provided under the Cultivated Clam Crop Provisions. The rate used to calculate premium will be the rate effective on the last date of the month.

- (2) **Administrative fees** - If CAT policy, the administrative fee is due when the Inventory Value Report and application are submitted, not later than November 30 proceeding the crop year.

E. INSURANCE ENDS AT THE EARLIEST OF:

- (1) The date of final adjustment of a loss when the total indemnities due equal the amount of insurance; or
- (2) November 30.
- (3) All applicants must be eligible for crop insurance benefits and not be listed on the Ineligible Tracking System. Any producer who is ineligible because of debt may subsequently become eligible by paying the debt. A producer may then apply for aquaculture crop insurance for the remainder of the crop year if the application is submitted more than 30 days before the end of the crop year. Refer to Section 2 (f) of the Common Crop Policy, Basic Provisions for provisions regarding insurance eligibility.

8. COVERAGE LEVELS

To be effective for the current crop year, changes to coverage level elections are limited as follows:

- A. **FOR NEW POLICIES**: changes may not be made after the date of the application.
- B. **FOR CARRYOVER POLICIES**: coverage level changes and/or changes in unit by share must be made prior to the sales closing date **for the applicable crop year**. Changes may not be made after November 30.
- C. (1) **For buy-up policies**: the price percentage is limited to 100 percent of the price election, and only one coverage level election may be selected for each basic unit.

(2) **For CAT policies**: the price percentage is 55 percent of the price election, and the coverage level is 50 percent. If the insured selects catastrophic risk protection for one practice, all types under the practice are insured at the catastrophic risk protection level.

9. APPLYING SURVIVAL FACTORS

A. **INTENT OF SURVIVAL FACTOR**

The intent for the survival factor is to recognize the normal expected survival of seed clams as they grow to a marketable size. Historical survival factor data indicate the final number for clams harvested from a known quantity of seed planted. Therefore we required that the survival factor be applied to seed (>10mm) placed in various production systems. The result is the number of clams that are expected to grow to harvest size.

B. **APPLYING SURVIVAL FACTORS**

The survival factor is applied to the initial reported annual inventory and when inventory revisions are accepted, and remain a constant throughout the crop year. The factor is applied only once and does not enter into any loss adjustment calculations. The adjusted inventory carries through each stage until harvest. Clams that are seeded subsequent to the annual inventory report must be adjusted by the survival factor before they are added to the beginning inventory.

10. BASIS OF COVERAGE

Insurance is offered to any applicant growing the insurable crop and meeting the requirements for acceptance under the terms of the Common Crop Insurance Policy, Cultivated Clam Pilot Crop Insurance Provisions, and Special Provisions of Insurance. The AIP must verify the inventory value to determine insurability, coverage and rates.

A. CLAM INVENTORY VALUE REPORT

The AIP will verify the insured's inventory value report along with the application for the initial and each subsequent crop year, not later than November 30 preceding the crop year. The inventory value report:

- (1) Is used to establish premium and amount of insurance
- (2) Must be revised yearly and include, for each basic or optional unit all growing locations, the stages of the clams and the stage values, and your share by growing location. The inventory value must also reflect the stages as shown in the Special Provisions. At our option and at any time, you may be required to provide documentation in support of any of your reports, including, but not limited to, a detailed listing of growing locations, unit values, the numbers and the sizes of clams seeded or placed for grow-out; your share, sales of clams and purchases of seed clams for the 3 previous crop years, and of your ability to properly obtain and maintain clams.
- (3) When used for catastrophic level policies only, the insured must report clam sales for the previous crop year on the clam inventory value report. The insured may be required to provide documentation to support such sales.

B. REVISED CLAM INVENTORY VALUE REPORT

- (1) May be used to revise the inventory value report to increase the reported inventory value.
- (2) If allowed for in the Special Provisions you may revise your inventory value report to increase the reported inventory value. We may inspect the inventory. Your revised inventory value report, if allowed by the Special Provisions, will be considered accepted by us and coverage will begin on any proposed increase in inventory value at the later of December 1 or 30 days after your written request is received by us unless we reject the proposed increase in your inventory value in writing.
- (3) The AIP will reject any requested increase if a loss occurs before the later of December 1 or within 30 days of the date the request is made.

11. ACCEPTABLE RECORDS

If farm management records are used to support production reports, they must be substantiated by records from a marketing outlet, processor, packer, first handler, etc. The unit of measure is the individual clam. For all marketable size clams, certified records may include a dated printout or receipt from each first handler of the crop for that crop year. A printout or receipt from a packing shed facility that complies with HACCAP (Hazard Analysis Critical Control Point) standards, processor, auction, marketing cooperative, jobber, commission merchant, sales broker, or a warehouse receipt which shows total production and date of transaction is

acceptable. Cartons, crates, bushels or pounds must be converted to an individual clam count.

12. INSURED CROP

A. PROVISIONS FOR INSURED CROP

In lieu of the provisions of section 8 and section 9 of the Basic Provisions, the insured crop is all the clams in the county that:

- (1) Meet all the requirements for insurability and for which prices are provided in the actuarial documents;
- (2) Are acceptable to the AIP;
- (3) That are grown by a person who in at least three of the five previous crop years:
 - (i) Grew clams for commercial sale; and
 - (ii) Participated in the management of a clam farming operation by at least exercising decision-making authority over all operational aspects of the farm;
- (4) Are grown in a county for which a premium rate is provided in the actuarial documents;
- (5) Are in a growing location acceptable to the AIP; and
- (6) Use a practice that fixes the insurable clams to the land within the growing location.

Refer to the Special Provisions of Insurance for specific limitations associated with clam age restrictions.

B. PRODUCTION SYSTEMS

The type of production system used; netting, bags, trays or pens, will depend on the method used to fix the insurable clams to the ground.

- (1) **Netting**: Netting with a weighted line attached to the sides is placed over the top of seed that is broadcast on prepared substrate. The net is staked to the bottom with metal stakes fabricated from rebar. A weighted line is fastened to the net approximately six inches from the outer edges to provide a protective skirt that will be buried vertically in the sand when the stakes are in place. Sand bags can also be used to secure the netting in place.
- (2) **Bags**: Bags are constructed in a number of configurations, usually four feet square and constructed of vinyl-coated wire or high-density polyethylene mesh in various mesh diameters, depending on the size of the clam, are connected to support framing by nylon ties or monofilament to support the bags to allow

water to flow from all sides but inhibit predator access.

- (3) **Trays:** Trays consist of material that protect clams from predation and incorporate a sediment substrate. Trays can be made to any size and from a variety of material. Trays are allowed to settle into the sediment as adequate amounts of sediments are deposited in the trays.
- (4) **Pens:** Pens are box-like structures, which allow water to flow from all sides but inhibit predator's access. Pens are constructed with support frames made of rebar and mesh, usually vinyl-coated wire or high-density polyethylene. The pen is placed where it is accessible during low tide and is able to accumulate natural substrate in order to stay in place.

13. INSURED CAUSES OF LOSS

A. INSURED CAUSES

In accordance with the provisions of section 12 of the Basic Provisions, insurance is provided for the death of clams caused only by the following causes of loss that occur within the insurance period unless otherwise limited by the Special Provisions:

- (1) Oxygen depletion due to vegetation, microbial activity, harmful algae bloom, or high water temperature unless otherwise limited by the Special Provisions;
- (2) Disease;
- (3) Freeze;
- (4) Hurricane;
- (5) Decrease in salinity associated with a weather event verified by National Oceanic & Atmospheric Administration (NOAA) or United States Geologic Survey (USGS) or as otherwise defined in the Special Provisions;
- (6) Tidal wave;
- (7) Storm surge that is associated with a local weather event and verified by NOAA or USGS; or
- (8) Ice floe.

14. CAUSES OF LOSS EXCLUDED

A. INSURED CAUSES OF LOSS EXCLUDED

In addition to the causes of loss excluded in section 12 of the Basic Provisions, we do

not insure against any loss caused by:

- (1) The insured's inability to market clams as a direct result of quarantine; shellfish harvest ban, boycott, or refusal of a buyer to accept production;
- (2) Collapse or failure of buildings or structures;
- (3) Loss of market value;
- (4) Vandalism;
- (5) Theft;
- (6) Pollution;
- (7) Predation (unless allowed by the Special Provisions); or
- (8) Dredging.
- (9) Any cause of loss that occurred prior to or after the insurance period;
- (10) Any unexplained shortages or disappearance of inventory; or
- (11) Failure of the clam to grow to a marketable size.

15. CAUSE OF LOSS LIMITATIONS

- A. **DISEASE DAMAGE** is covered, unless otherwise specified on the Special Provisions, if medication does not exist for control of the disease. Loss from diseases that are not controllable will be covered but **limited only to the dead clams that result from the disease**. Veterinarians, Shellfish Pathologists, and Extension Agents may be used as experts in verifying the cause of loss.
- B. **IF YOU ARE CLAIMING DISEASE** as the cause of loss, you must prove at your own expense that the death of the clams was due to disease by isolating a sample of the clams and identifying the disease following histological or pathological examination conducted by a veterinarian who is a certified fish pathologist or a person approved by us.
- C. **RELOCATION OF CLAMS TO UNINFECTED AREAS WILL NOT BE COVERED BY INSURANCE.**

16. CONDITIONS OF ACCEPTANCE

- A. **REQUIREMENT FOR INSURABILITY**

As a requirement for insurance for the 2008 and succeeding crop years, Global Positioning System (GPS) coordinates are required to identify all growing locations insured by leases, parcels, permits, or license numbered growing sites. GPS coordinates are also required to identify areas subleased to other individuals or entities. You are required to provide these coordinates with sufficient detail to accurately identify each of the corners of the leases, parcels, permits, or license numbered growing sites and areas subleased to other individuals or entities. You must provide this information to your AIP in digital format as latitude and longitude. Latitude values will contain a leading zero and will be considered as North, and longitude values will be considered as West. Each coordinate will be provided in the format: DDDMMddd where:

DDD = degrees (right justified and left zero filled where appropriate)

MM = minutes (right justified and left zero filled where appropriate)

ddd = decimal minutes, rounded where necessary to 3 positions."

For example, Latitude: 03740109, Longitude: 12223825

- B. AN INSPECTION REPORT MUST BE COMPLETED** by the AIP prior to the acceptance of any application for insurance of a cultivated clam crop, and at certain other times [as noted in 16C]. The cultivated clam crop inspection is conducted by the AIP to determine the acceptability of the cultivated clam operation as an insurance risk. The AIP's underwriters shall review the inspection reports and determine whether to bind coverage. In case of a negative inspection report, the AIP shall respond by choosing from the options under E of this section. The inspection report is an active record and must be maintained until a new inspection is completed or the policy is no longer valid. The three-year record retention is not applicable to the inspection report if the policy remains in effect. There must be an inspection report in the insured's file while the policy remains in effect.
- C. AN INSPECTION OF THE CULTIVATED CLAM OPERATION MUST OCCUR** in the following circumstances: (Check Special Provisions of Insurance for additional required inspections.)
- (1) **The first year for all insureds** (CAT or Additional Coverage) when a policy is transferred from another AIP to determine if:
 - (a) The inventory amounts reported are appropriate for CAT policies and the limits are not exceeded as provided under Section 6(f) of the Cultivated Clam Crop Provisions or Special Provisions of Insurance;
 - (b) The reported values are reasonable and supported by acceptable supporting documentation;
 - (c) The risk is acceptable;
 - (d) Insurability requirements are met (refer to section 8 of the Cultivated Clam Crop Provisions for additional information); and
 - (e) If there is existing damage.
 - (2) When a new site or location is added to the operation.
 - (3) For Catastrophic insurance coverage only: To determine that the inventory value

report for all clams does exceed the lesser of the value from section 6(b) of the policy or the percentage identified on the Special Provisions of Insurance for the percent of the insured's previous year's sales of clams; and if the above restrictions cause the insured to under report the value of their inventory, the insured must present records acceptable to the AIP to prove their actual inventory value in order to receive a waiver of these restrictions.

- (4) When there is an increase in value shown on the Clam Inventory Value Report of 50% or more of the previous values as measured on a policy basis, not by practice.
- (5) At the AIP's discretion
- (6) When an inspection report is not in the insured's file, a new inspection report must be completed.
- (7) To determine that the insured crop is grown in a county for which a premium rate is provided in the actuarial documents.
- (8) To determine if the insured crop is in a growing location acceptable to the AIP.
- (9) To determine that the insured uses a practice that fixes the insurable clams to the land within the growing location.
- (10) To verify the practice carried out by the insured.
- (11) To determine that the number of clams reportedly seeded have actually been seeded.
- (12) To determine that the survival factors were applied correctly according to the Special Provisions of Insurance.
- (13) To determine that the insured crop meets all the requirements for insurability and for which prices are provided in the actuarial materials.

D. THE INSPECTION MUST BE COMPLETED timely enough to provide the AIP the opportunity to reject the application, determine the value of all inventory, or cancel the policy, if necessary, before the coverage inception date as specified in section 9 of the Cultivated Clam Crop Provisions.

E. A NEGATIVE INSPECTION REPORT REQUIRES one or more of the following actions.

- (1) **Notify the applicant or insured in writing** that if the deficiency is not corrected and a loss occurs, there are potential grounds for denying any claim based on the Cultivated Clam Pilot Crop Insurance Provisions.
- (2) **Notify the applicant or insured** that coverage is denied (reject or cancel the policy) on the basis of the negative inspection report and requirements of the

Cultivated Clam Pilot Crop Insurance Provisions.

- (3) Review the insured's cultivated clam production and sales records.
- (4) Re-inspect the cultivated clams to determine if the causes for denying a claim or coverage have been corrected.

F. THE REQUIRED INSPECTION ELEMENTS AND RECOMMENDED AIP ACTIONS in case of a negative report are:

<u>INSPECTION</u>	<u>ACTION (NEGATIVE REPORT)</u>
(1) Eligibility	Deny coverage
(2) Reasonableness of production and sales records.	Review cultivated clam reported records and values. If still negative, deny coverage.
(3) Records in support of a negative request to waive CAT Inventory Value limits.	Review producer's records. If still inadequate deny request. Provide coverage at stated policy limits.
(4) Failure to provide Documentation or providing inadequate documentation.	Deny coverage on the basic unit.

G. SELECTING SAMPLES FOR THE INSPECTIONS

Sample selection for cultivated clam crop inspections will be conducted as follows:

- (1) Florida and South Carolina - Due to the frequency of seeding dates and favorable environmental conditions for relatively rapid growth, group seeding dates by calendar quarter and sample clams by calendar quarter.
 - (a) For example, ask the grower for December through February seedings and sample from this subgroup. The March through May seedings would form another subgroup, etc.
 - (b) Map the seedings. The quarterly seedings may or may not be in one area of the lease.
 - (c) Sample 1 percent of the total number of bags in the lease area. Sample proportionally from each of the seeding quarters. If any clams have been seeded during a quarter, sample at least one bag per seeding quarter.
- (2) Florida and South Carolina Bag Culture - Sample 1 percent of the bags for each seeding quarter. For bottom culture practices (includes round pens),

use the sampling procedure for Bottom Culture, except instructions to sample by type, as outlined in (3) below. Note: Round sample computation to next whole number, for example 1.25 to 2.

EXAMPLE:

No. of Bags (Practice) 023	Seeding Quarter	1 Percent of Quarter/ Practice	No. of Samples/ Quarter/ Practice 023
20	Q1	1% of 20 = 0.20	1
125	Q2	1% of 125 = 1.25	2
0	Q3	0	0
350	Q4	1% of 350 = 3.50	4
Total Number of Bags 495			

- (3) Massachusetts and Virginia Bottom Culture, sample by type. Sample a minimum of 1 sample per 100 sq. ft. in the bed. If the producer has 5 beds or less, sample all beds. If a producer has 5 or more beds, sample a minimum of 5 beds and 1 additional bed for every additional 5 beds, (i.e., 10 beds: sample 5 + 1 = 6).

From the schematic provided by the insured, randomly select insurable clams from seeded beds of stage 2, and stage 3 clams to measure. Select the number of seeded plots to sample, by type, based on the proportion of a particular type's area to total area.

EXAMPLE:

A grower has ten 14 x 100 beds of stage 2 clams and thirty 14 x 100 beds of stage 3 clams. Stage 2 clams constitute 14,000 square feet of area (10 x 14 x 100) and stage 3 clams constitute 42,000 square feet of area (30 x 14 x 100). Stage 2 clams comprise 25 percent of the total area (14,000 divided by 56,000) and stage 3 clams comprise 75 percent of the total area.

The grower has a total of 40 beds of stage 2 and 3 clams. Of the ten beds of stage 2 clams, randomly sample the minimum five beds plus one additional bed from the remaining five beds for a total of six. Of the thirty beds of stage 3 insurable clams, randomly sample the minimum five beds plus one additional bed for each five beds in the remaining twenty-five beds for a total of ten. In this example, 16 of the grower's insurable clam beds would be sampled.

H. PROCEDURES FOR CONDUCTING THE INSPECTIONS

These instructions provide information on the method for conducting the

inspections for bottom culture and bagged culture practices. Establish the standing stock of live clams according to the practice. Use of the clam appraisal worksheet in sections 8 and 9 of the loss adjustment standards handbook (FCIC-25800) is recommended.

Note: For these inspections, removal of the clams from the substrate to a boat or dockside in order to facilitate the inspections will not be considered removal from the growing area or unit per the cultivated clam crop provisions or special provisions of insurance.

(1) BOTTOM CULTURE

(a) Determine the distribution of stage 2 and stage 3 clams in the plots at the field site.

1 Have the grower provide the GPS coordinates for each site and a schematic diagram of the site, including the length and width of each growing area and the date the clams were seeded; or

2 Interview the grower on-site, and identify the growing areas with stage 2 and stage 3 clams. Generate a diagram from this interview.

(b) Determine the overall area in square feet that has been seeded to each stage group.

1 Based on the schematic diagram provided by the grower or that was generated from the interview; calculate the surface area of growing areas that have been seeded with each of the insurable stage groups or types of clams.

a If the growing areas are all similar, count the number of growing areas that have been seeded, and measure the surface area of one growing area. Calculate the total surface area seeded; or

b If each growing area is different, measure the surface area that has been seeded in each, and calculate the total area.

2 Enter the total surface area in square feet in item 28 of the Clam Appraisal Worksheet for Bottom and Round Pen Culture.

(c) Measure the density of clams in each of the plots.

1 At each of the seeded plots, randomly select and mark three points within the bed for measuring the density. Do not sample at the edges of the bed.

2 With permission of the grower either lift the netting to permit access or cut an "X" through the anti-predator netting at a spot of sufficient size to sample the bed. Two methods to sample the bed are:

a PVC Pipe

i Insert the core into the sediment to a depth of six inches at the marked site and extract a sample of the substrate and clams.

ii Convert the pipe diameter to square feet by the following formula and enter the factor, rounded to the nearest thousandth, in item 20 of the appraisal worksheet. Show the calculation of the factor in the remarks section, and note the size of the PVC pipe used.

iii $144 \div (3.14 * r^2)$ where r = pipe radius

EXAMPLE: 12-inch diameter pipe { $144 \div (3.14 * 6^2) = 1.274$ }

If PVC pipe is used for stage 2 or stage 3 clams the minimum diameter pipe must be 12 inches. A one (1) square foot sampler may be constructed and used without the conversion factor.

b Rake Widths Across the Bed

i For a particular clam bed, rake across the width of the bed.

ii Rake across the bed in three different locations.

Xx	xx	xx
Xx	xx	xx
Xx	xx	xx
Xx	xx	xx
Xx	xx	xx
Xx	xx	xx

iii If this sampling procedure is used, enter the total number of square feet in the three sample areas in item 21 and enter 1.00 in item 22 of the Clam Appraisal Worksheet for Bottom and Round Pen Culture.

iv When using the rake method for sampling stage 2 and stage 3 clams, the rake basket must be lined with mesh having holes not larger than 9 mm.

3 Sort the sample through a one-quarter inch mesh sieve, and count all of the live clams. Live clams are relatively heavy, and their hinges are closed.

4 After counting, return live clams to the substrate.

5 Close the cut in the netting--dental floss in a tapestry needle can be used to stitch the netting back together.

(2) BAGGED CULTURE

(a) Determine the distribution of bags by seeding quarter. Mark their locations on the map of the lease area.

(b) Count the total number of bags in each seeding quarter and enter in item 21 of the appraisal worksheet. Enter 1.00 in item 20 of the appraisal worksheet.

(c) Randomly select bags to sample within each seeding quarter. See section 5B for sampling requirements.

(d) The number of live clams per bag may be assessed by:

1 Counting all live clams in the bag; or

2 Volumetric Sampling:

a Sort the live clams from the dead clams. Live clams are relatively heavy and their hinges are closed.

b Determine the total number of live clams in a graduated cylinder's measured volume by counting the number of live clams in a small subsample whose volume already has been measured.

c
$$\frac{\text{No. of Live Clams in Subsample}}{\text{Subsample Volume (ml)}} \times \text{Total Vol. of Live Clams} = \text{Total Number of Live Clams.}$$

d Appropriate volumes for the size of clams counted are:

Growout Bag..... 100 - 4000 ml.

e CLAM SIZES

Number per pound and hinge size below are approximate:

- Cherrystone 3-4 per pound 2 inch hinge
- Top Neck 5-7 per pound 1 1/2 inch hinge
- Middle Neck 7-9 per pound 1 1/4 inch hinge
- Little Neck 10-13 per pound 1 inch hinge
- 7/8 Inch 14-18 per pound 7/8 inch hinge
- Pasta 18-25 per pound 3/4 inch hinge

Hatchery - Clam culture begins in the hatchery with the production of seed. In the hatchery, adult clams are induced to spawn by altering the temperature of the water. Fertilized eggs and resulting free-swimming larval stages are reared under controlled conditions in large, cylindrical tanks filled with filtered, sterilized seawater. Larvae are fed cultured phytoplankton (microscopic marine algae) during a 10 to 14-day larval culture phase. After approximately 2 weeks, the larvae begin to settle out of the water column and metamorphose into juvenile clams. Even though a true shell is formed at this time, post-set seed are still microscopic and vulnerable to fluctuating environmental conditions. Thus, they are maintained in downwellers at the hatchery for another 30 to 60 days until they reach about 1 mm in size.

Nursery - The land-based nursery protects small seed until they are ready to be planted out onto the lease for growout. Nursery systems built on land usually consist of weller systems or raceways. Water, pumped from an adjacent saltwater source, provides naturally occurring phytoplankton and oxygen to the clam seed. Depending on water temperatures, 1-2 mm seed, obtained from the hatchery, require from 8 to 12 weeks to reach 5-6 mm in shell length, the minimum size planted in the field.

Growout - Clams are primarily grown on estuarine or coastal submerged lands leased from the State of Florida. Since clams are bottom-dwelling animals, growout systems are designed to place the clam seed on the bottom and provide protection from predators. Most clam growers in the state use a soft bag of polyester mesh material. The bag is staked to the bottom and naturally occurring sediments serve as the bottom substrate. Bag culture usually involves a 2-step process. The first step entails field nursing seed with shell lengths of 5-6 mm (1/4 inch) in a small-mesh bag. After about 3-6 months, the seed reach a growout size of 12-15 mm shell length (1/2 inch) and they are transferred to a bag of larger mesh size. A crop of littleneck clams (25 mm or 1-inch shell width) can be grown in 12-18 months.

I. AS A RESULT OF ANY INSPECTION:

- (1) **In all cases, the AIP may choose to re-inspect.** If the deficiency upon which a denial was based is corrected, an applicant may reapply for coverage. This application must be completed before sales closing.
- (2) **The company will verify** the liability reported is consistent with the clam inventory report. When the inventory is over or under-reported the company will request that the insured provide evidence supporting the insured's reported values or revise the inventory appropriately.

17. ESTABLISHING THE UNIT VALUE

A. UNIT VALUE BEFORE LOSS

The cultivated clam crop provisions define Unit Value Before Loss as the stage value of undamaged insurable clams in the basic or optional unit, as applicable, immediately prior to the loss occurrence. To establish the value of undamaged insurable clams the AIP must reconstruct the value before loss by determining:

- (1) The number and stages of all insurable clams on the lease sites that existed on the date of the inventory value report.
- (2) Any adjustment for changes, including but not limited to; seeding, sales, harvesting and changing in stage.
- (3) The prices contained in the actuarial materials.
- (4) The applicable survival factors applied

B. UNIT VALUE AFTER LOSS

This is defined as the value of remaining insurable clams in each basic or optional unit based on the percentage of the maximum reference prices contained in the actuarial documents, immediately following the occurrence of a loss as determined by our appraisal plus any reduction in value due to uninsured causes. This is used to determine the loss of value for each individual unit so that losses can be paid on an individual unit basis, optional or basic, as applicable.

18. UNIT DIVISION

A. A basic unit may be divided into optional units in accordance with section 2(b) of the Cultivated Clam Pilot Crop Insurance Provisions. Regardless of the existence of optional units, the basic unit value before loss will be used to establish:

- (1) The amount of insurance.
- (2) Crop year deductible.
- (3) Under reporting factor.
- (4) Premium.
- (5) The maximum indemnity payable.

B. In lieu of the optional unit provisions in the Basic Provisions, if the insured elect's additional levels of coverage, for an additional premium, inventory that would otherwise be a basic unit may, unless limited by the Special Provisions, be divided into

optional units by non-contiguous lease parcels. Additional optional units may also be authorized in the Special Provisions.

C. OTHER UNIT DIVISION PROVISIONS:

- (1) Basic units are established by share. All insurable claims in which the insured has a share are a basic unit.
- (2) If the insured elects optional units (additional coverage only), the insured must provide separate inventory value reports for each unit and keep all records of seeding, harvest, sales and uninsured losses separately by unit.

Failure to keep separate records will result in all optional unit inventories under a basic unit being combined into a basic unit at loss time. If the insured elects optional units, their amount of insurance will be divided among optional units in relation to unit value before loss of claims in each optional unit. If, at the time of loss, the aggregate value of the claims in the insured's optional units exceeds their basic unit inventory value, the insured will be subject to the under reported factor provisions.

D. FOR CAT:

- (1) Basic units are based on all lease parcels combined in the county in which the insured has a 100 percent interest and separately for each lease parcel in the county in which the insured has a different share interest (see the CAT endorsement).
- (2) Optional units are not available.

19. PENALTIES FOR MISREPORTING

A. UNDER REPORT FACTOR (PENALTY FOR UNDER INSURING)

If the policyholder fails to report an amount of insurance equal at least to the value of the inventory at the time of any loss determination, a penalty in proportion to the amount of under insurance will be applied.

For example: The insured has a 100 percent share and the inventory value reported by the insured was \$100,000. At the time of loss, basic unit value before loss was \$125,000. $\$100,000 \text{ divided by } \$125,000 = .80$ under reporting factor.

B. OVERSTATING INVENTORY VALUE

If the policyholder reports an amount of insurance that exceeds the actual value of the inventory, the insured will pay for coverage on which no indemnity can be collected. The policy will not pay any indemnity amount that exceeds the actual inventory value and premium dollars will be wasted. In addition, the crop year deductible will be overstated and will force the occurrence deductible to be applied for each loss in the

case of multiple losses and the insured may not be indemnified.

20. CLAM INVENTORY VALUE REPORT

A. A CLAM INVENTORY VALUE REPORT MUST BE:

- (1) Signed and dated by the insured, or the insured's authorized representative. It is unacceptable to mark report "signature on file" or "report by telephone" or any other remark without the original insured's signature.
- (2) Submitted with the insured's application and for each subsequent crop year, not later than November 30 proceeding the crop year.
- (3) If a clam inventory value report is not submitted by November 30, we may elect to determine the inventory values in effect as of November 30. In most cases, this will protect the interests of insureds. However, if the expiring reported inventory value is too large, for example, or if there had been a loss during the year and the insured restocked and increased the reported inventory, the insured may have purchased too much coverage and thus be subject to paying unnecessary premium and be subjected to the effects of an unnecessarily large crop year deductible. Since reported values cannot be revised downward, insureds should be advised to accurately report their planned inventory for the crop year.

B. THE REPORT WILL INCLUDE:

- (1) All growing locations;
- (2) The insured's share;
- (3) The stage values of the clams;
- (4) Verifiable records to substantiate mortality factors if other than Special Provisions of Insurance factors are used in calculations;

SEE PREMIUM CALCULATION, SECTION 21

For CAT, the inventory value may not exceed the amount listed on the Actuarial Documents.

The limitations contained in the Actuarial Documents may cause the grower to under report an inventory which may adversely affect the insurance coverage. The grower may present acceptable records to the company that demonstrates the actual inventory value and the company underwriter may waive the limits and issue coverage for a larger amount. A copy of any of these waivers must be kept in the policyholder's files.

- (5) Previous year's clam sales (CAT only); and

(6) The practice (e.g. bottom culture, nursery bag, growout bag).

C. THE COMPANY MAY ALSO REQUEST DOCUMENTATION INCLUDING:

- (1) A detailed listing of growing areas;
- (2) A map that shows enough detail to distinguish seeded areas within the site;
- (3) Sales of clams and purchases of seed clams for the past 3 years; and
- (4) The numbers and sizes of clams seeded or placed in nursery or grow-out.

D. CLAM INVENTORY VALUE REPORT REVISIONS:

- (1) This report may be revised to increase the insured inventory value due to:
 - (a) Changes in the clam growing operation (increases in the growing area and/or inventory volume);
 - (b) Replanting after damage or sales.
- (2) The Clam Inventory Value report may be revised after the sales closing date to increase or decrease the value due to clerical errors.
- (3) An upward revision after sales' closing requires that an entry will be made in the remarks section of the Inventory Value report form stating, "**correction - revised upward.**"
- (4) New inventory is subject to inspection requirements and the 30-day waiting period.

21. DEDUCTIBLES

A. CROP YEAR DEDUCTIBLE

The crop year deductible is determined when the level of coverage is selected. It is equal to 100 percent minus the selected coverage level (e.g., 100% – 75% = 25%) times the inventory value reported for the basic unit times the share. The crop year deductible is reduced by any previously incurred crop year or occurrence deductible until the deductible is met. Once the crop year deductible is met, subsequent losses are not reduced by a deductible. The crop year deductible may increase due to increases in inventory value on a revised PIVR. The increased deductible under the endorsement is applicable only during the effective period of the peak endorsement.

B. OCCURRENCE DEDUCTIBLE

Individual losses are determined by applying an occurrence deductible. The occurrence deductible is the lesser of:

- (1) **The deductible percentage**, (1 - the coverage level) multiplied by the unit value before loss multiplied by the under-report factor, or
- (2) **The (remaining) crop year deductible.**

22. PREMIUM CALCULATION

Premium is calculated by multiplying the Inventory Value by the coverage level, premium rate, and share.

23. REPLANT PAYMENTS

REPLANTS

- A. Unless limited by the Special Provisions, a replanting payment is authorized for insurable clams if death of the clams was due to an insurable cause of loss.
 - (1) The maximum amount of the replanting payment will be the lesser of your actual cost of replanting or the result obtained by multiplying the replanting payment amount contained in the Special Provisions by your insured share
 - (2) Only one replanting payment will be made per lease parcel planted within the crop year;
 - (3) You may not collect a replant payment and an indemnity for the same loss.

24. EXCLUSIONS TO CROP PROVISIONS

- A. **WRITTEN AGREEMENTS** - The written agreement provisions in the Basic Provisions do not apply.
- B. **LATE PLANTING** - Provisions of section 16 of the Basic Provisions do not apply.
- C. **PREVENTED PLANTING** - Provisions of section 17 of the Basic Provisions do not apply.

25. INDEMNITY EXAMPLE

Successive indemnities may be paid on the same basic unit subject to a new occurrence deductible each time. Each indemnity paid reduces the amount of insurance remaining on the

basic unit. The maximum indemnity is limited to the amount of insurance for the basic unit. When the amount of indemnities paid equals the amount of insurance, no additional coverage is available for the remainder of the crop year. However, coverage can be reestablished if the cultivated clams are restocked and a revised inventory value report is approved.

The following is a simple “single unit” example of an indemnity determination. Additional examples are contained in the Cultivated Clam Pilot Crop Insurance Provisions, Section 18.

Amount of Insurance = Reported inventory value x Coverage level
 Amount of Insurance = \$100,000 x .75 = \$75,000

- A Share 100%
- B Reported inventory value \$100,000
- C Coverage level 75%
- D Amount of Insurance $B(\$100,000) \times C(.75) = D(\$75,000)$
- E Crop Year Deductible $B(\$100,000) \times .25(1 - C\{.75\}) = E(\$25,000)$

Values at the time of loss:

- F Unit value before loss \$125,000
- G Unit value after loss \$ 30,000
- H Under report factor $B(\$100,000) \div F(\$125,000) = H(.80)$
- I Occurrence deductible $F(\$125,000) \times .25(1 - C\{.75\}) \times H(.80) = I(\$25,000)$

- Step 1 Determine the under report factor [H(.80)]
- Step 2 $F(\$125,000) - G(\$30,000) = \$95,000$
- Step 3 $\$95,000(\text{result of Step 2}) \times .80(\text{result of Step 1}) = \$76,000$
- Step 4 $\$76,000(\text{result of Step 3}) - I(\$25,000) = \$51,000$
- Step 5 $\$51,000(\text{result of Step 4}) \times A(1.000) = \$51,000 \text{ indemnity}$

The amount of insurance is reduced to \$24,000 $D(\{\$75,000\} - \$51,000)$.

NOTES

26. REFERENCE MATERIAL

EXHIBIT 1 LIST OF SHELLFISH PATHOLOGISTS

Dr. Hank Stoddard

Shamrock Veterinary Clinic
Cross City, FL
352/498-5293

Dr. Mike Slayter

Florida Department of Agriculture
Animal Disease Diagnostic Lab
Kissimmee, FL
407/846-5200

Dr. Gary Rodrick

University of Florida
Aquatic Food Products Lab
Gainesville, FL
352/392-1991, ext. 310

Dr. Pam Parnell, DVM

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**Perkinsus marinus* assays only

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EXHIBIT 2

INSTRUCTIONS FOR COMPLETION OF CULTIVATED CLAM PRE-ACCEPTANCE INSPECTION REPORT

Complete an inspection report for all insurable units.

The following entries are required for the Cultivated Clam Pre-Acceptance Inspection Report in a format selected by the company. The sequence of items on the form will be determined by the format selected by the API.

This report must be completed within thirty days of the signature date on the application by the applicant and as directed by the API for applicants/insureds.

IDENTIFYING THE INSURED

- Company name
- 1 Crop year
- 2 Unit number
- 3 Site Management
- 4 Name of applicant/Insured
- 5 Address/State and County
- 6 Phone number
- 7 Name of Operator (if different than applicant)
- 8 Name of Agent/Agency and phone number
- 9 Agent phone number

GROWER INFORMATION

- 10 Enter the number of years' experience applicant has growing clams.
- 11 Has the unit been insured in prior years?
- 12 Does the insured own or operate a hatchery?

UNDERWRITING INFORMATION

Describe in detail the management practices carried out on the insured's operation.

- 13 Describe in detail the management practices carried out on the insured's operation.
- 14 Describe in detail the condition of the protective netting or growout bags.
- 15 Describe in detail the location of the unit with relation to neighboring lease, lease parcel or licensed sites.
- 16 By what date is seeding completed for the unit under normal conditions?
- 17 Determine the average planting density of clams on each unit. Refer the FCIC 25800, Section 4 for appraisal methods to determine planting density.
- 18 Obtain and attach copies of the lease, lease parcel or licensed site identified by GPS coordinates, and survey maps with boundaries that are discernable. Attach a hand drawn map that shows enough detail to distinguish seeded areas within the sites.
- 19 Is the unit adjacent to areas that have been or will be dredged? If yes, explain in detail
- 20 Are there known soil or disease limitations associated with the site (heavy clay soils or QPX etc.)?

EXHIBIT 2

- 21 Describe in detail the area's susceptibility to storm damage?
- 22 Is the lease, lease parcel, or licensed area accessible at low tide? If not, what is the depth of the water over the lease site at low tide?

ACREAGE/INSPECTION INFORMATION

- 23 Are the areas susceptible to ice damage?
- 24 Are the areas susceptible to fresh water intrusion?
- 25 Are the areas susceptible to excessive silting?
- 26 Calculate and enter the percent of total lease, lease parcel or licensed site in use.
- 27 Will Cooperative State Research, Education and Extension Service Marine Biologists or Sea Grant personnel be available for reference on technical questions?
- 28 Does the applicant have sufficient records to substantiate the inventory value?
- 29 Is lease, lease parcel or licensed site in close proximity to recreational areas or navigation channels?
- 30 Does the applicant have leases, lease parcels or licensed sites that are not in the pilot areas?
- 31 Additional information and comments (attach additional sheets as needed)

INSPECTOR'S EVALUATION

- 32
 - A. The inspector's evaluation of the operation and management as to whether it is above average, average, or below average of those in the area.
 - B. The inspector's evaluation of the lease, lease parcel, or licensed sites as to whether they are above average, average, or below average.
- 33 Action Recommended by inspector to Accept or Reject the operation for insurance, and explanation if rejection is recommended.

SIGNATURES

Inspector signs and dates on the date of inspection.

Company supervisor signs and dates on the date received and evaluated.

- 34 Inspector/Date/Phone Number
- 35 Supervisor/Date/Phone Number

Inspectors are encouraged to solicit advice from Cooperative State Research, Education and Extension Service, Marine Extension Agents and Biologist, Shellfish Pathologists, National Marine Fisheries Service, Sea Grant Aquaculture Specialists, or other aquatic specialists knowledgeable in Clam Culture on matters they are unfamiliar with.

EXHIBIT 2

For Illustration Only

CULTIVATED CLAM PRE-ACCEPTANCE INSPECTION REPORT

COMPANY	1. Crop Year	2. Unit	3. Is lease site managed by applicant? If "NO" who manages it?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
4. Name of Applicant/Insured			6. Applicant/Insured's Telephone Number Area Code				
5. Address/State/County			()				
			7. Name of Operator (if different than applicant)				
8. Name of Agent/Agency:							
9. Agent/Agency Telephone Number: Area Code ()							

GROWER INFORMATION

10. Enter number of years experience applicant has growing clams.		<input type="text"/>	Years		
11. Has this unit been insured in prior years? If yes, years insured and prior contract number(s)?		<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
12. Does the insured own or operate a hatchery?		<input type="checkbox"/>	Yes	<input type="checkbox"/>	No

UNDERWRITING INFORMATION

13. Describe in detail the management practices carried out on the insured's operation.
14. Describe in detail the condition of the protective netting or growout bags.
15. Describe in detail the location of the unit with relation to neighboring lease, lease parcel or licensed sites.
16. What date is seeding completed for the unit under normal conditions?
17. Determine the average planting density of clams on each unit.
18. Obtain and attach copies of the lease, lease parcel or licensed site and survey maps. For each lease, lease parcel or licensed site, provide Global Positioning Coordinates (GPS). Each coordinate will be provided in the format: DDDMMddd where; DDD = degrees (right justified and left zero filled where appropriate) MM = minutes (right justified and left zero filled where appropriate) ddd = decimal minutes, rounded where necessary to 3 positions. (Ex., GPS Coordinates: 03740109, 12223825)
19. Is the unit adjacent to areas that have been or will be dredged? If yes, explain in detail.
20. Are there known soil or disease limitations associated with the site (heavy clay soils or QPX etc.)?
21. Describe in detail the areas' susceptibility to storm damage?
22. Is the lease, lease parcel or licensed area accessible at low tide? If not, what is the depth of the water over the lease site at low tide?

EXHIBIT 2

For illustration only)						
ACREAGE/INSPECTION INFORMATION						
23. Are the areas susceptible to ice damage?		Yes		No		
24. Are the areas susceptible to fresh water intrusion?		Yes		No		
25. Are the areas susceptible to excessive silting?		Yes		No		
26. Percent of total lease, lease parcel or licensed site in use -						
	Less Than 50%	50 - 60%	61 - 70%	71 - 80%	81 - 90%	91 - 100%
(1)						
(2)						
(3)						
27. Are Cooperative State Research, Education and Extension Service Marine Biologists or Sea Grant personnel available for reference on technical questions?						
28. Does the applicant have sufficient records to substantiate the inventory value?						
29. Is lease, lease parcel or licensed site in close proximity to recreational areas or navigation channels?						
30. Does the applicant have lease, lease parcel or licensed sites that are not in the pilot areas?						
31. Additional information and comments (attach additional sheets as needed)						
INSPECTORS EVALUATION						
32. A. Your evaluation of the management of this operation:				B. Your evaluation of the lease, lease parcel, or licensed sites		
<input type="checkbox"/> Above Average	<input type="checkbox"/> Average	<input type="checkbox"/> Below Average		<input type="checkbox"/> Above Average	<input type="checkbox"/> Average	<input type="checkbox"/> Below Average
33. Action Recommended:						
<input type="checkbox"/> Acceptance	<input type="checkbox"/> Rejection					
If rejection explain why:						
SIGNATURES						
34. Inspector				Date	Phone Number and Contact Point	
35. Supervisor				Date	Phone Number and Contact Point	
This form example does not illustrate all required entry items (e.g., signatures, dates, etc.).						
Page 2 of 2						

EXHIBIT 3

INSTRUCTIONS FOR COMPLETION OF CLAM INVENTORY VALUE REPORT

The following entries are required for the clam inventory value report in the format selected by the company. The sequence of the items on the form will be determined by the format selected by the company.

This report must be completed at the time of application for new insured's.

For carryover insureds, this report must be filed on or before November 30.

See Section 7 for important dates.

This report may be revised any time during the crop year for clerical errors.

This report will include all locations, identified by GPS coordinates, with boundaries that are discernable, and identified on a map that shows enough detail to distinguish seeded areas within the site.

This report may be used to add values of the inventory that has been replaced after a loss or which were not included in the original report.

IDENTIFICATION

Company name

Insured's name

Street address

City, State, Zip Code

If revised report check block (**NOTE:** cannot revise downward unless clerical error.)

Contract number

Crop year

Unit number

Date

INVENTORY INFORMATION

STAGE 1 (Fill out only if allowed by the Special Provisions)

Practice

GPS Coordinates for Lease, Lease parcel, or Licensed Site.

Date seeded

Seed size

Number seeded

Survival factor from Actuarial Documents unless producer provides records with a higher survival factor.

Price (The CAT price per clam is calculated by multiplying the ADM1 REF MAX CAT Price times the Stage Price Factor per clam and the Buy-up price per clam is calculated by multiplying the ADM1 REF MAX Price times the Stage Price Factor per clam.)

EXHIBIT 3

Stage 1 Inventory value

TOTALS: Multiply total number of stage 1 clams seeded by survival factor by price to arrive at stage 1 Inventory Value.

STAGE 2

Practice

GPS Coordinates for Lease, Lease parcel, or Licensed Site.

Date seeded

Seed size

Number seeded

Survival factor from Actuarial Documents unless producer provides records with a higher survival factor.

Price (The CAT price per clam is calculated by multiplying the ADM1 REF MAX CAT Price times the Stage Price Factor per clam and the Buy-up price per clam is calculated by multiplying the ADM1 REF MAX Price times the Stage Price Factor per clam.)

Stage 2 Inventory value

TOTALS: Multiply total number of stage 2 clams seeded by price to arrive at stage 2 Inventory Value

STAGE 3

Practice

GPS Coordinates for Lease, Lease parcel, or Licensed Site.

Date seeded

Seed size

Number seeded

Survival factor from Actuarial Documents unless producer provides records with a higher survival factor.

Price (The CAT price per clam is calculated by multiplying the ADM1 REF MAX CAT Price times the Stage Price Factor per clam and the Buy-up price per clam is calculated by multiplying the ADM1 REF MAX Price times the Stage Price Factor per clam.)

Stage 3 Inventory value

TOTALS: Multiply total number of stage 3 clams seeded by price to arrive at stage 3 Inventory Value

STAGE 4

Practice

GPS Coordinates for Lease, Lease parcel, or Licensed Site.

Date seeded

Seed size

Number seeded

Survival factor from Actuarial Documents unless producer provides records with a higher survival factor.

Price (The CAT price per clam is calculated by multiplying the ADM1 REF MAX CAT Price times the Stage Price Factor per clam and the Buy-up price per clam is calculated by multiplying the ADM1 REF MAX Price times the Stage Price Factor per clam.)

Stage 4 Inventory value

TOTALS: Multiply total number of stage 4 clams seeded by price to arrive at stage 4 Inventory Value.

CALCULATION FOR AMOUNT OF INSURANCE

Enter Total of Stage 1 Inventory Value plus Total of Stage 2 Inventory Value plus Total of Stage 3 Inventory Value plus Total of Stage 4 Inventory Value multiplied by Insured's Share times Coverage Level Selected by Insured to arrive at Amount of Insurance.

Previous year's sales (CAT ONLY): Report for each basic unit, by practice, the sales for the prior year.

All claims on the unit including any claims owned or subleased by other individuals or entities must be reported. Enter the name of the individual or entity and the number of claims by stage, owned or subleased by anyone other than the insured.

UNDERSTANDING BY INSURED

Assure that the inventory values reported are based on the Clam Inventory Value Report. Understand that over reporting of inventory will cause the premium to be overpaid.

Understand that under reporting will result in a factor being applied to the indemnity reducing the amount by the percentage under insured.

Understand that only cultivated clams identified on the crop provisions and Special Provisions are eligible for coverage.

INSURED'S SIGNATURE

The insured must sign the clam inventory value report and date the form. It is not acceptable to mark report "signature on file" or "report by telephone" or any other remark without the original signature of the insured. Applicable certification statement must be included on any form that the insured signs. See FCIC-24040 Document Supplemental Standards Handbook to determine applicable certification statement.

REPRESENTATIVE'S SIGNATURE

The AIP's representative must sign and date the Clam Inventory Value Report.

REQUIRED STATEMENTS

The Collection of Information and Data (Privacy Act) Statement and the Nondiscrimination Statement must be included on any form the individual signs or provided to the individual on separate form, for each form that is signed by the individual. A copy must be maintained by the AIP. The Certification Statement must be included on any form that the insured signs that collects information from the insured. See the FCIC 24040 Document Supplemental Standards Handbook to determine the applicable statements to include on any forms.

EXHIBIT 3

For illustration only							CLAM INVENTORY VALUE REPORT								
COMPANY NAME: _____ Insured's Name: _____ Street Address: _____ City, State, Zip: _____							IF REVISED REPORT CHECK HERE 			Contract Number		Crop Year			
							Unit Number				Date				
							Practice: STAGE 1							Practice: STAGE 2	
GPS Coords. for Lease, Parcel, Licensed Site I.D.	Date Seeded	Seed Size	Number Seeded	Survival Factor	Price	Stage 1 Inventory Value	GPS Coords. for Lease, Parcel, Licensed Site I.D.	Date Seeded	Seed Size	Number Seeded	Survival Factor	Price	Stage 2 Inventory Value		
			x	x	=					x	x	=			
STAGE 1 INVENTORY TOTAL							STAGE 2 INVENTORY TOTAL								
Practice: STAGE 3							Practice: STAGE 4								
GPS Coords. for Lease, Parcel, Licensed Site I.D.	Date Seeded	Seed Size	Number Seeded	Survival Factor	Price	Stage 3 Inventory Value	GPS Coords. for Lease, Parcel, Licensed Site I.D.	Date Seeded	Seed Size	Number Seeded	Survival Factor	Price	Stage 4 Inventory Value		
			x	x	=					x	x	=			
STAGE 3 INVENTORY TOTAL							STAGE 4 INVENTORY TOTAL								
Stage 1 Inventory Value	Stage 2 Inventory Value	Stage 3 Inventory Value	Stage 4 Inventory Value	Total Inventory Value		Share	Coverage Level		Amount of Insurance						
				+	+	+	=	x	x	=					
(CAT ONLY) PREVIOUS YEARS SALES							(Enter the name of the individual or entity and the number of clams by stage)								
							(Enter the name of the individual or entity and the number of clams by stage)								
I submit this report pursuant to the requirements of the Cultivated Clam Crop Insurance Provisions and certify to the best of my knowledge that it is correct. I understand and agree that: Only clams identified in the Cultivated Clam Crop Provisions Special Provisions of Insurance are insurable, providing all applicable requirements are satisfied. Indemnities will be based on the Inventory Value Report. Over reporting my inventory value for insurance purposes will cause me to overpay premium and will increase my crop year deductible. I cannot reduce my premium or crop year deductible by revising my Inventory Value Report downward for any reason except to correct clerical errors. If I under report my inventory value any indemnity will be prorated by an under report factor. I have read and understand the terms of the Cultivated Clam Pilot Crop Insurance Provisions. My questions have been answered by my agent to my satisfaction. The information I have furnished on this form is complete and accurate. Applicable Certification Statement															
Insured's Signature							Date			Representative's Signature				Date	