



Watts and Associates Inc.  
Crop Insurance Division

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## Nursery Value Select – A Proposed Alternate Approach for Nursery Crop Insurance Coverage

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Contract Number: D17PA00058

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Presented To:  
Nursery Industry Stakeholders and Interested Parties

By:  
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Richard Allen

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## Agenda

- Introductions
- Comparison: Current and Proposed Insurance
- Overview of Nursery Value Select (NVS)  
Concept
- Liability
- Loss Adjustment and Indemnity
- Purpose of Listening Session
- Discussion
- Other Participant Comments



## Introductions

Watts and Associates, Inc. More than 35 years in agricultural economics research, more than 30 years in crop insurance research, more than 30 years in crop biology research.

Dr. Alan Baquet, Watts and Associates, Inc. 30 years in crop insurance research, 25 years as an extension researcher and administrator.

Richard Allen, Watts and Associates, Inc. more than 15 years in crop insurance research.

Audience Introductions



## Nursery Value Select

- The **Florida Nursery Growers and Landscape Association** and **USDA RMA** developed the NVS concept as a less complex approach to providing crop insurance coverage to nursery operations.



## Comparison: Current and Proposed

### Current System

- Burdensome inventory requirements (PIVR) at application – DataScape software for all plant types.
- Without an endorsement plant prices are regionally based – Plant Price Schedule.
- Loss adjustment process requires two inventories in addition to the PIVR and any subsequent SIVR.

### Nursery Value Select

- At application operation estimates a 12 month plan for inventory value based on plant type.
- Plant prices are based on operation's sales records or a percent of catalog price to reflect discounting.
- Loss adjustment process requires two inventories at the time of loss.



## Nursery Value Select Concept Overview

- Under NVS an insured nursery operation would:
  - Provide an **expected monthly inventory value for each plant “type”**  
While USDA RMA defines 16 types, many nurseries grow between 1 and 5 types on each of their operations.
  - Select a Coverage Level
  - Select a basic unit structure (basic unit or optional units) and value based on the estimated monthly inventory schedule.
  - Submit a Nursery Catalog to their agent who will pass it on to their Approved Insurance Provider (AIP)



## Nursery Value Select Concept Overview (cont.)

- Under NVS an Approved Insurance Provider (AIP) through their agents would determine:
  - The suitability of the insured’s monthly inventory plan (*i.e.*, look for unusual or unexpected patterns);
  - The fairness of catalog prices (*i.e.*, look for deviations from industry prices);
  - The insurability of plants proposed for insurance (*i.e.*, look for plants grown in unusual locations or by unusual practices as well as plants not grown by the insured historically)

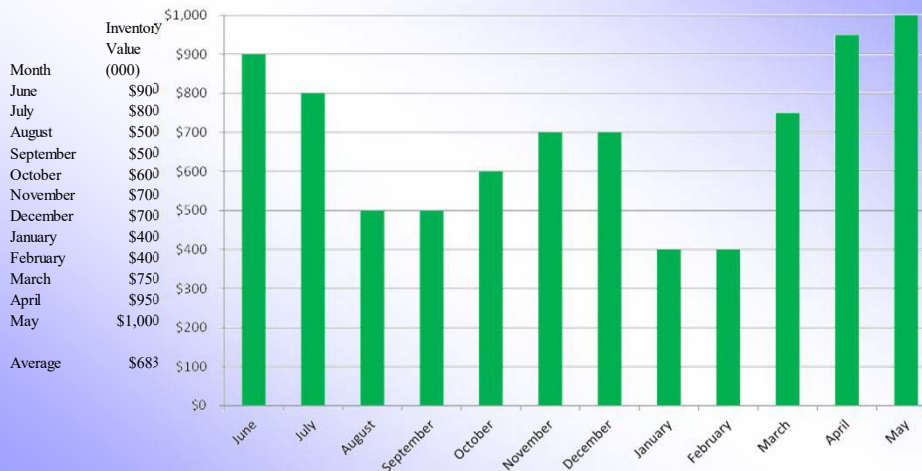
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## Liability

### Monthly Inventory Plan for One Plant Type



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## Liability

- One minus the coverage level is the percentage of the insured's deductible. ( $1 - 0.75 = 0.25$ )
- The insured's share is the fraction of the operation owned by the insured.
- The insured can choose to insure at CAT or Buy-up
  - The value insured at CAT is 50% of the average estimated inventory value over the 12 month calendar, all types are insured as a single "basic" unit, and the price is 55% of the price that is used under Buy-up.
  - Under Buy-up the insured **selects** a value between \$0 and the highest monthly inventory value, can insure by type, and can choose a coverage level between 50% (50% deductible) and 75% (25% deductible).



## Loss Adjustment and Indemnity

### In the Event of a Loss

- The Nursery Operation
  - Provides sales price data for a pre-determined time frame whose length may be determined based on input at these listening sessions for plants by size in the nursery immediately prior to the loss; and
  - Provides the insurance provider a plant inventory from immediately prior to the loss by species, variety, and size;
  - Allows insurance provider to inspect the nursery to examine the undamaged inventory as well as damaged plants following the loss.



## Loss Adjustment and Indemnity

### In the Event of a Loss

- The AIP
  - Inspects the damaged crop(s);
  - Uses average sales prices from Nursery Operator sales records (or a percent of the Catalog price) to determine the pre-loss inventory value and the Value of the Damaged crop;
  - Calculates the indemnity value based on the policy structure; and
  - Pays the insured.



## Loss Adjustment and Indemnity

- Indemnity Determination Process
  - Determines pre-loss inventory value
  - Percent of Damage – Current proposal is that loss for each plant is established by the AIP and Nursery Operator, perhaps with the help of a third-party expert.
  - There would be some “damage schedule” to simplify establishing a damage percentage for the entire unit. For example:
    - 1) Plant Damaged < 25 percent would be counted as 0% loss;
    - 2) Plant Damaged 25-74 percent would be counted as 50% loss; and
    - 3) Plant Damaged 75-100 percent = 100% loss (remaining plant destroyed or declared uninsurable)
  - But the meaning of “percent damaged” may differ by type, variety, and size.



## Loss Adjustment and Indemnity

- Based on the insured's sales receipts or a fraction of the catalog price, the adjuster:
  - Determines "Damage Value"
  - Determines the "Percent of Loss" for the unit
  - Determines the Deductible for the Occurrence (a percentage of the total policy deductible)
  - Calculates an Indemnity

The indemnity takes into account the deductible as well as the self-insurance reflected in specifying a Selected Unit Value that is less than the highest inventory value or is less than the inventory value at the time of loss.



## Loss Adjustment and Indemnity

The maximum amount of indemnity under CAT is 27.5% of the average of the inventory values and the indemnity decreases if the inventory at the time of loss is less than the average of the estimated inventory values.

The maximum amount of indemnity under Buy-up is the Selected Unit Value X Coverage Level X Share.

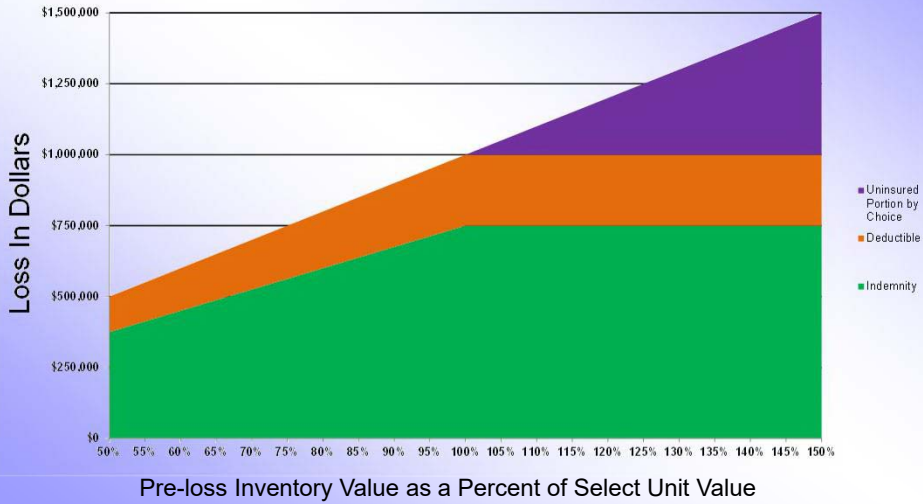
In both cases the indemnity is impacted by the pre-loss inventory value.



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# Share of Loss Covered by Insurance and Insured

Select Unit Value - \$1,000,000, Coverage Level - 75%  
100% Loss



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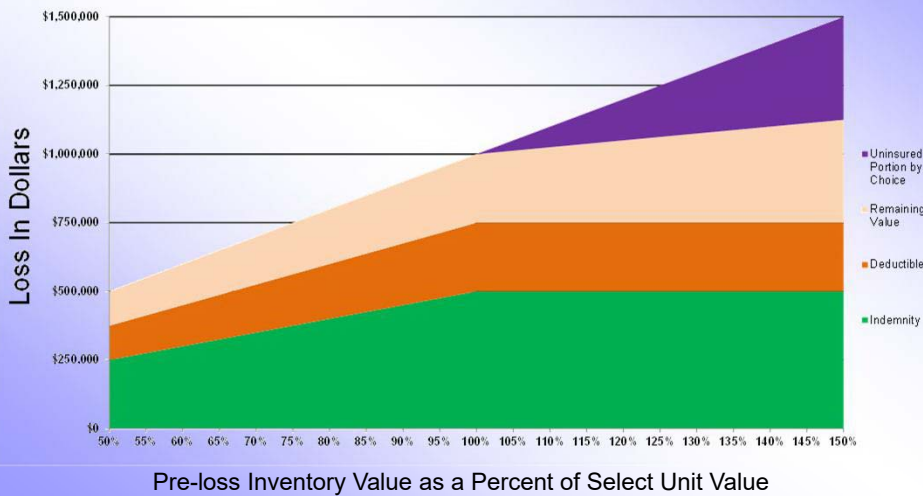
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# Share of Loss Covered by Insurance and Insured

Select Unit Value - \$1,000,000, Coverage Level 75%  
75% Loss



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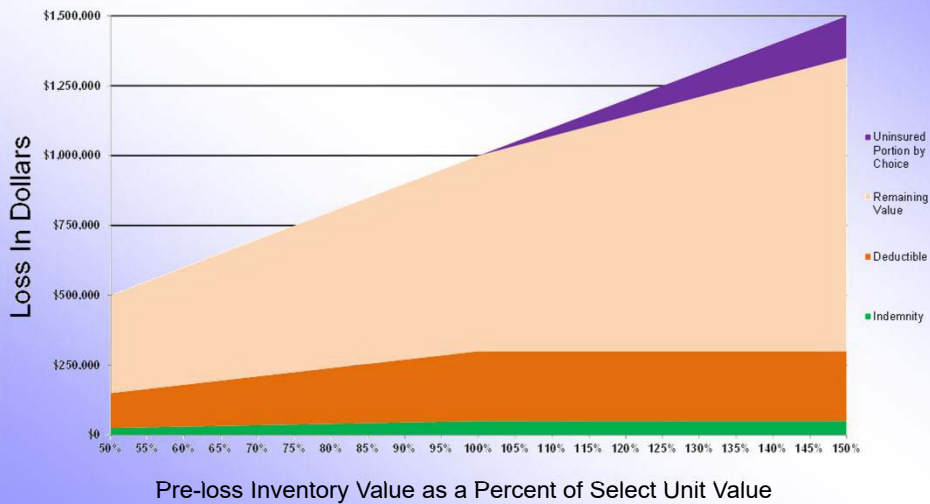




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## Share of Loss Covered by Insurance and Insured

Select Unit Value - \$1,000,000, Coverage Level 75%  
30% Loss



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## Purpose of Listening Session

### Broadly, RMA wants to know:

- Industry stakeholder thoughts about Nursery Value Select concept; and
- Modification suggestions for Nursery Value Select from stakeholders.
- Interest in CAT vs buy-up

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## Discussion

- **Our Goal is to gather information about:**
  - Operation's Record keeping (Daily, Weekly, Monthly, Quarterly, Semi-annually, Other)
  - Risks producers encounter in their nursery operations.
  - Potential interest in Nursery Value Select
  - Elements of existing program you would like to carry over to the new concept.
  - Ways to Value Plants with No Sales History
  - Catalog Values / Discounts offered
- **Other Participant Comments**



## Thank you for participating

Contact Information  
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Ask for  
Dr. Alan Baquet or  
Richard Allen



## Nursery Value Select Plant Types

### Plant Types from Nursery Crop Provisions

- 1) Deciduous Trees (Shade and Flower);
- 2) Broad-leaf Evergreen Trees;
- 3) Coniferous Evergreen Trees;
- 4) Fruit and Nut Trees;
- 5) Deciduous Shrubs;
- 6) Broad-leaf Evergreen Shrubs;
- 7) Coniferous Evergreen Shrubs;
- 8) Small Fruits;
- 9) Herbaceous Perennials;
- 10) Roses;
- 11) Ground Cover and Vines;
- 12) Annuals;
- 13) Foliage;
- 14) Palms and Cycads;
- 15) Liners; and
- 16) Other plant types listed in the Special Provisions.



## Nursery Value Select Indemnity Calculation

- Step 1: Determine FMVA
  - Sum (average sales price of each plant and size x quantity of each plant and size)
- Step 2: Determine Percent of Damage
- Step 3: Determine Damage Value
  - Sum(average sales price for each damaged plant and size multiplied by the quantity of each damaged plant and size and the percent of damage value)
- Step 4: Determine Percent of Loss
  - $\text{Damage Value} / \text{FMVA}$



## Nursery Value Select Indemnity Calculation

- Step 5: Determine Occurrence Deductible
  - MIN(Deductible Percentage X FMVA, Deductible Percentage X Select Unit Value (Insurance Deductible))
- Step 6: Determine Indemnity
  - MIN(FMVA, Selected Unit Value) x (Percent of Loss) x Percent Share – Occurrence Deductible







## Nursery Value Select Indemnity Calculation

<b>1 FMVA</b>	<b>\$1,000,000</b>	<b>\$1,000,000</b>	<b>\$1,000,000</b>
<b>2 Percent of Damage</b>			
<b>3 Damage Value</b>	<b>\$1,000,000</b>	<b>\$750,000</b>	<b>\$300,000</b>
<b>4 Percent of Loss</b>	<b>1.000</b>	<b>0.7500</b>	<b>0.3000</b>
<b>5 Occurrence Deductible</b>	<b>\$250,000</b>	<b>\$250,000</b>	<b>\$250,000</b>
<b>6 Indemnity</b>	<b>\$750,000</b>	<b>\$500,000</b>	<b>\$50,000</b>
<b>Remaining Amount of Protection</b>	<b>\$0</b>	<b>\$250,000</b>	<b>\$700,000</b>
<b>Remaining Insurance Deductible</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>



# Loss Adjustment and Indemnity

## Extent of deductible and self-insurance

-  **very high** appropriate for an insured who is not at all risk averse
-  **high** appropriate for an insured who is somewhat risk averse
-  **medium** appropriate for an insured who is moderately risk averse
-  **low** appropriate for an insured who is risk averse

