

United States Department of Agriculture



Federal Crop Insurance Corporation

FCIC-20300U (1-2017) FCIC-20300-1U (03-2017)

# PECAN TREE CROP INSURANCE STANDARDS HANDBOOK

2018 and Succeeding Crop Years

# RISK MANAGEMENT AGENCY KANSAS CITY, MO

| TITLE: PECAN TREE CROP INSURANCE             | NUMBER: 20300U (1-2017)                           |
|--|---|
| STANDARDS HANDBOOK                           | 20300-1U (3-2017)                                 |
| <b>EFFECTIVE DATE:</b> 2018 and succeeding   | ISSUE DATE: March 16, 2017                        |
| Crop Years                                   |   |
| SUBJECT:                                     | <b>OPI:</b> Actuarial and Product Design Division |
|  | APPROVED: March 16, 2017                          |
| Provides the procedures and instructions for |   |
| administering the Pecan Tree crop insurance  | /s/ Richard Flournoy                              |
| program                                      |   |
|  | Deputy Administrator for Product Management       |

## **REASON FOR AMENDMENT**

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

- 1. Various references to the 2017 crop year were corrected.
- 2. Paragraph 11: Specifies that written agreements are not allowed under the PCT program.
- 3. Paragraph 23(A)(1): Clarifies that the selection of either the RM1 or RM2 tree reference price is made on a policy basis.
- 4. Paragraph 25(2): Revised the deadline to submit the PAIR.
- 5. Paragraph 25(3): Removed for clarity.

# PECAN TREE CROP INSURANCE STANDARDS HANDBOOK

| Pecan Tree Crop Insurance Standards Handbook |               |               |   |   |   |  |  |
|--|---------------|---------------|---|---|---|--|--|
|  | TP<br>Page(s) | TC<br>Page(s) | Text<br>Page(s)                             | Exhibit<br>Number                               | Exhibit<br>Page No.(s)  | Date   | Directive Number   |
| Remove                                       | 1-2           |               | 1-2<br>5-8<br>11-12                         | 9   |   | 01-2017  | FCIC-20300U  |
| Insert                                       | 1-2           |               | 1-2<br>5-8<br>11-12                         | 9   |   | 03-2017  | FCIC-20300-1U  |
| Current<br>Index                             | 1-2           | 1             | 1-2<br>3-4<br>5-8<br>9-10<br>11-12<br>13-21 | 1<br>2<br>3<br>4<br>5<br>6<br>7<br>8<br>9<br>10 | 22<br>23-29<br>30-38<br>39-53<br>54-56<br>57-58<br>59-63<br>64-68<br>69-70<br>71-80 | 03-2017<br>01-2017<br>03-2017<br>01-2017<br>03-2017<br>01-2017<br>01-2017<br>01-2017<br>01-2017<br>01-2017<br>01-2017<br>01-2017<br>01-2017<br>01-2017<br>01-2017<br>01-2017<br>01-2017<br>01-2017 | FCIC-20300-1U<br>FCIC-20300U<br>FCIC-20300-1U<br>FCIC-20300U<br>FCIC-20300-1U<br>FCIC-20300U<br>FCIC-20300U<br>FCIC-20300U<br>FCIC-20300U<br>FCIC-20300U<br>FCIC-20300U<br>FCIC-20300U<br>FCIC-20300U<br>FCIC-20300U<br>FCIC-20300U<br>FCIC-20300U |

# **CONTROL CHART**

## FILING INSTRUCTIONS

The handbook pages listed in the Control Chart above under the "Insert" heading replace such pages in the FCIC-20300U Pecan Crop Insurance Standards Handbook, dated January 2017. This handbook is effective for the 2018 and succeeding crop years.

# PECAN TREE CROP INSURANCE STANDARDS HANDBOOK TABLE OF CONTENTS

# PAGE NO.

| PART 1 | GENERAL INFORMATION AND RESPONSIBILITIES1                                 |
|--------|---|
| 1      | Purpose   |
| 2      | General Rules   |
| 3      | Background Information  |
| 4-10   | (Reserved)  |
| PART 2 | INSURABILITY  |
| 11     | Availability  |
| 12     | Eligibility   |
| 13     | Important Dates   |
| 14     | Coverage Levels and Policy Changes  |
| 15     | Additional Responsibilities   |
| 16-2   | 0 (Reserved)  |
| PART 3 | PCT PROVISIONS AND PROGRAM DETAILS  |
| 21     | Insured Crop  |
| 22     | Causes of Loss  |
| 23     | Establishing the Amount of Protection and Unit Value                      |
| 24     | Establishing Stages   |
| 25     | PAW (PCT)/PAIR (PCT)  |
| 26     | Acceptable Records  |
| 27     | Unit Division   |
| 28     | Service Forms   |
| 29-3   | 0 (Reserved)  |
| PART 4 | ENDORSEMENTS AND OPTIONS 16   |
| 31     | Endorsements and Options  |
| 32-4   | 21 (Reserved)   |
| EXHIB  | TS  |
| 1      | Acronyms  |
| 2      | Definitions   |
| 3      | Producer Pre-Acceptance Worksheet – (Pecan Trees)                         |
| 4      | Pre-Acceptance Inspection Report (Pecan Trees)                            |
| 5      | Grove Identification Map & Instructions for Completion                    |
| 6      | Reference Material  |
| 7      | Plot Sampling – Native Orchards – No Distinguishable Planting Pattern     |
| 8      | Form Standards - Sample Plot Worksheet for Native Orchards                |
| 9      | Average Revenue Value and Maximum and Minimum Actual CTV Reference Prices |
| 10     | Examples  |
| 10     |   |

## PART 1 GENERAL INFORMATION AND RESPONSIBILITIES

#### 1 Purpose

The purpose of this UG is to provide supplementary instructions for establishing PCT crop insurance coverage in accordance with the PCT CP (17-PCT), PCT LASH (FCIC-20300L), and the CIH (FCIC-18010).

In the course of delivering PCT crop insurance, 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, 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 insured signs or must be provided to the insured on a separate form, for each form that is signed by the insured. A copy must be maintained by the AIP. The Certification Statement must be included on any form that is not 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 pecan trees. Exceptions, changes, and additions are referenced in this supplement.

The PCT insurance program is a Tree Based Dollar Amount of Insurance Crop (Plan Code 40) program. The terminology and instructions contained in the CIH that apply to the completion of forms and responsibilities of the AIP and the insured apply to the PCT program.

### **3** Background Information

RMA is implementing the PCT program for all insurable pecan trees beginning with the 2018 crop year. The program is patterned after other tree-based dollar crop programs and provides an indemnity for trees that are either damaged or destroyed by freeze, wind (e.g. hurricane or tornado), freezing rain (ice damage), and other listed perils during the insurance period. The program's insurance coverage is based on a specified dollar amount of insurance per tree.

## 4-10 (Reserved)

# PART 2 INSURABILITY

#### 11 Availability

The PCT program is available for counties contained in the actuarial documents for Alabama, Arkansas, Florida, Georgia, Kansas, Louisiana, Mississippi, Missouri, New Mexico, Oklahoma, South Carolina, and Texas.

Written agreements are not allowed under the PCT program.

## 12 Eligibility

## A. PCT Program

The PCT program is available to all persons with a share in a commercial PCT orchard meeting the insurability provisions contained in the BP, PCT CP, and SP and is located in approved states and counties.

## **B.** Ineligible Persons

Any person with a delinquent debt to RMA or an AIP, or who is otherwise ineligible under the BP may not obtain PCT insurance coverage.

#### **13** Important Dates

## A. Contract Change Date

January 31 preceding the CD.

## **B.** Sales Closing Date

May 15.

## C. Cancellation and Termination Dates

June 30 before the beginning of the crop year.

#### **D.** Premium Billing Date

March 1 of the calendar year in which the insurance period ends.

### E. Acreage Reporting Date

For new and carryover insureds, May 15.

#### F. Beginning of the Insurance Period Dates

- (1) For new policies: On July 1 following the SCD date unless the AIP notifies the insured that all or a part of the insured's trees are not insurable; and
- (2) For carryover policies: July 1 of the crop year.

## G. End of the Insurance Period

The insurance period ends for the crop year:

- (1) With the occurrence of any event specified in section 11(b) of the BP that affects any of the trees within a unit. Coverage only remains in effect on trees that have not been affected by an event specified in section 11(b) of the BP; or
- (2) On June 30 of the crop year.

See section 11 of the BP for additional end of insurance provisions.

## 14 Coverage Levels and Policy Changes

## A. Coverage Levels

The insured may select only one coverage level for the PCT, as specified in Section 3 of the CP.

## **B.** Policy Changes

Changes to the insurance coverage that would become effective for the current crop year are limited as follows:

- (1) Changes may not be made after the SCD.
- (2) In subsequent years, for carryover policies, the insured may elect for the crop year on the applicable form by the SCD/ARD:
  - (a) A higher coverage level;
  - (b) To add optional coverage (CTVE or OLO);
  - (c) Increase the insured share; or
  - (d) Report additional insurable trees. If the amount of protection increases more than ten percent, the additional trees must be inspected and accepted before insurance will attach.
- (3) If insured damage is evident at the time the election is made under subparagraph B(2) or if damage occurs after the SCD but before the date insurance coverage attaches for the crop year under subparagraph B(2), then any election or change made under subparagraph (B)(2) will not be effective for the crop year for which the election or reported change was made. Any additional trees reported under subparagraph B(2)(d) will not be insurable.

## 15 Additional Responsibilities

## A. Agent Responsibilities

In addition to the responsibilities discussed in the CIH, the agent will assist the insured in completing the annual acreage report, PAW (PCT), and advise insureds of their responsibility to comply with all of the reporting requirements of the policy.

- (1) The agent will assist the insured to ensure that the stage-blocks reported by the insured are established in accordance with the definition of stage found in the CP and the stage table in paragraph 24A of this UG.
- (2) The agent will assist the insured in correctly reporting the number of trees by block within the unit by utilizing plat maps, Grove Identification Maps, past acreage reports, and/or other relevant sources.

## **B.** Insured Responsibilities

In addition to the responsibilities discussed in the CIH, the insured must accurately report the number of trees in each unit, by stage-block, on the PAW (PCT) (including planting dates) and the acreage report. Stage-block locations are identified on orchard identification maps (i.e. Grove Identification Maps). If the insured is unable to correctly report this information, the agent should be requested to provide assistance.

16-20 (Reserved)

# PART 3 PCT PROVISIONS AND PROGRAM DETAILS

#### 21 Insured Crop

#### A. Insured Crop (Commodity) and Type

The insured crop (commodity) and types are listed in the SP. The insurable crop and types are shown below:

| <u>Crop</u> | <u>Type</u>                  |
|-------------|------------------------------|
| Pecan Trees | Group I Improved Varieties   |
|             | Group II Improved Varieties  |
|             | Group III Improved Varieties |
|             | Group IV Native Pecan Trees  |
|             | Group V Seedling Pecan Trees |

See the SP for a listing of varieties. Other types may be insurable if specified in the SP.

A single administrative fee is due for the insured crop.

See section 12(c) and section 13(i) of the CP for special insured duties and indemnity determinations for native pecan trees.

#### **B.** Insurability

\*\*\*

In accordance with section 8 of the CP, the insured crop will be all pecan trees in the county for which a premium rate is quoted in the AD:

- (1) That are grown in the county listed on the insured's application;
- (2) In which the insured has a share;
- (3) That are adapted to the production area;
- (4) That are grown in an orchard for the purpose of producing a commodity intended to be sold for human consumption;
- (5) That have the potential to produce a yield typical of a healthy tree of the same trunk diameter as the subject trees unless such trees were dehorned, pruned, or hedged; and
- (6) That are located in an orchard that contains the minimum number of acres specified in the SP.

## C. Exclusions

- (1) In addition to the exclusions listed in section 8 of the BP, the insured crop will not include any trees that:
  - (a) Have not reached the 2nd crop year after the crop year of set out before the date insurance attaches. For example, the trees were set out in the 2017 crop year, insurance for such trees would attach July 1 for the 2019 crop year;

#### FCIC-20300-1U

- (b) Are native trees that do not have a trunk diameter of at least three inches;
- (c) Have been grafted within a 12-month period before the date insurance attaches, unless the grafting is a result of rehabilitation;
- (d) Are unsound, diseased, or unhealthy;
- (e) For stage I III trees, are toppled or leaning to the extent that reset is required, if practical, and such trees are not reset (see the definition of reset);
- (f) For stage IV V trees, are toppled or leaning;
- (g) Were damaged before the beginning of the insurance period. (If trees suffered such damage the previous crop year, then insurance will not attach until the previous year's damage is determined, the insured submits a revised acreage report, and the trees are inspected and accepted by the AIP. A loss adjustment damage appraisal for the previous crop year will satisfy the inspection requirement.); or
- (h) Are inspected by the AIP and considered unacceptable.
- (2) In addition to the exclusions listed in section 8(b) of the CP, insurance will not be provided for:
  - (a) Blocks in which at least 25 percent of the:
    - (i) Trees are planted at a depth below the depth grown in the nursery or where the graft union is below the soil surface; or
    - (ii) Acreage is subject to poor drainage or ponding of water; or
  - (b) Any trees the insured intends to sequentially thin during the current crop year.

#### **D.** Insurable Acreage

- (1) Pecan trees interplanted with other perennial crops are insurable unless the AIP inspects the acreage and determine it is not insurable.
- (2) Each insurable block must contain the minimum number of trees per acre specified in the SP, if applicable.

#### 22 Causes of Loss

## A. Crop Provisions – Insured Causes

The CP provide crop insurance coverage only against the following causes of loss that occur within the insurance period:

(1) Wind (i.e. tornado or hurricane);

- (2) Unless otherwise provided on the SP, freeze damage on:
  - (a) Trees that are in the third through fifth crop years after the crop year in which the trees were set out. For example, the crop year of set out is 2018; the third through the fifth crop years are 2021 2023; and
  - (b) Native trees with a trunk diameter between three and seven inches;
- (3) Freezing rain (ice damage);
- (4) Drought if allowed on the SP resulting in the dying or death of the trees;
- (5) Flood;
- (6) Fire, unless weeds and other forms of undergrowth have not been controlled or pruning debris removed; or
- (7) Failure of the water supply caused by an insured peril, drought, or high salt levels in the water supply sufficient to cause damage (i.e. dying) to or death of the trees).

## **B.** Crop Provisions – Exclusions

In addition to causes of loss excluded in Section 12 of the BP, any damage other than actual damage to the tree due to the causes specified above is not insured.

#### 23 Establishing the Amount of Protection and Unit Value

#### A. Amount of Protection (unit)

The dollar amount of protection for the unit calculated by multiplying the number of insurable trees reported by the insured in each stage-block times the applicable reference price for the stage and restoration method (RM1 or RM2), as reported on the acreage report, totaling these values, and then multiplying this result times the insured's coverage level.

(1) The applicable reference price is the RM1 or RM2 Tree Reference Price shown in the AD (see the definition of restoration method) and selected by the insured.

The RM1 or RM2 reference price is selected on a policy basis by the SCD.

- (2) Under the CTVE, the applicable reference price is the Maximum CTV Reference Price shown in the AD. (The insured may elect to provide actual sales records to determine CTV Reference Prices. See paragraph 31B.)
- **B**. The unit value is the dollar amount determined for all insurable trees in each stage-block before any tree loss occurs times the applicable reference price for the stage and restoration method (RM1 or RM2), totaling these values (see A(1) and (2) above), and then multiplying this result times the insured's coverage level. The unit value is the basis for the indemnity and calculation of the URF.

#### 24 Establishing Stages

**A. Tree Stage:** The tree stage is based on the diameter of the trunk at the time insurance attaches. The diameter is measured as 4.5 feet [diameter at breast height (DBH)] unless trunk limbs (two or more large limbs originating from the main trunk from which scaffold limbs originate) or scaffold limbs emerge from the main trunk at below this height. In this

instance, measure the main trunk in an area below the trunk or scaffold limbs where the trunk diameter is uniform and free of trunk abnormalities (e.g. depressions, knots, etc.).

Trees that are pruned or dehorned are reduced to a lower stage (as shown below) and remain at that stage for the number of years required for the tree to recover to the original canopy volume (i.e. size) existing before pruning or dehorning.

| Trunk Diame | ter and Stage     | Number of Crop Years Remaining at the Reduced Stage |                    |                  |                    |  |
|-------------|-------------------|---|--------------------|------------------|--------------------|--|
| Crop        | Year              | Pruning   |                    | Dehorning        |                    |  |
| (Inches)    | Original<br>Stage | Reduced<br>Stage                                    | Years <sup>2</sup> | Reduced<br>Stage | Years <sup>2</sup> |  |
| $\leq 6$    | Ι                 | Ι   | 1                  | Ι                | 3                  |  |
| 6.01-10.0   | II                | Ι   | 1                  | Ι                | 4                  |  |
| 10.01-15.0  | III               | II  | 2                  | Ι                | 5                  |  |
| 15.01-20.0  | IV                | II  | 2                  | II               | 5                  |  |
| >20.0       | V                 | III   | 3                  | III              | 5                  |  |

<sup>1</sup>See A(1) below <sup>2</sup>Crop years remaining

Example: A tree that is 14 inches in diameter is in stage III.

If the tree is dehorned in the 2017 crop year, the tree will be reduced to a stage I tree for the 2018 - 2022 crop years (5 crop years remaining after the crop year of dehorning.). For the 2023 crop year, the stage will be determined based on the tree diameter applicable for the crop year (i.e. if the tree diameter increased to 19.25 inches, the tree would be in stage IV).

- (1) Insurable trees that have been spaded and relocated will be considered pruned for purposes of determining tree stage and crop years remaining and used to establish the insured's insurance coverage.
- (2) Are damaged to the extent they require rehabilitation will be staged based on the rehabilitation practice that is required regardless of whether the trees are rehabilitated.

# **B.** Toppled and Leaning Trees

Stage I – III toppled and leaning trees (toppled or leaning to the extent reset is practical; See the LASH, paragraph 33 for guidance) are not insurable. Such trees become insurable once they are reset. Trees reset after the beginning of the insurance period for the crop year can be reported for insurance purposes for the next crop year. Resetting trees does not affect tree stage unless the trees are also dehorned or pruned. (Insurance coverage for trees requiring resetting is only applicable to stage I – III trees. See definition of reset. Resetting stage IV – V trees is not considered practical. Stage IV – V trees that are toppled or leaning prior to insurance attaching are not insurable.)

## C. Staging Example

Tree stages will be based on the tree diameter or the stage determined for trees that are dehorned or pruned. Such trees remain in that stage for the number of crop years remaining since the trees were dehorned or pruned. Trees which are damaged to the extent rehabilitation is required are staged based on the level of rehabilitation required (dehorning or pruning) regardless of whether trees are actually rehabilitated.

| Event Crop Year – 2017<br>(7/1/2016 – 6/30/2017) |          | Stage for Each Crop Year Following Event Crop Year |                   |  |  |  |  |  |
|--|----------|--|-------------------|--|--|--|--|--|
|  |          | Crop Year<br>2018                                  | Crop year<br>2019 | Crop year<br>2020  | Crop year<br>2021  | Crop year<br>2022  | Crop year<br>2023  |  |
| Dehorned   | Stage IV | Stage II   | Stage II          | Stage II   | Stage II   | Stage II   | Stage IV or<br>Stage Based<br>on Actual<br>Trunk<br>Diameter |  |
| Pruned   | Stage IV | Stage II   | Stage II          | Stage IV or<br>Stage Based<br>on Actual<br>Trunk<br>Diameter |  |

Stage Example – For the 2018 Crop Year

## D. 75/25 Rule for Determining Tree Stage Blocks

- (1) Insureds must report trees by block on the PAW (PCT) (shown in Exhibit 3).
  - (a) For blocks in which 75% or more of the trees are the same stage, the insured may report the block as one stage-block.
    - **Example 1:** The insured has one unit with 375 stage IV trees, 100 stage III trees, and 25 stage I trees (same planting pattern common boundary).

| Block No. | Stage-Block | Stage | No. of Trees |
|-----------|-------------|-------|--------------|
| 001       | 001-IV      | IV    | 500          |

The block may be reported as follows:

The insured elects a 75% coverage level. The stage IV tree reference price is \$322 and the maximum CTV reference price is \$352.

Amount of protection  $_{\text{Tree}} = (500 \text{ x } \$322) \times 75\% = \$120,750$ 

Amount of protection  $_{CTVE} = (500 \text{ x } \$352) \times 75\% = \$176,000$ 

**Example 2:** The 25 stage I trees in the preceding example would be reported as a separate block if there was a distinct change in planting pattern in one area of the orchard (e.g. end rows at the edge of an orchard).

The insured may report the blocks as follows:

| Block No. | Stage-Block | Stage | No. of Trees |
|-----------|-------------|-------|--------------|
| 001       | 001-IV      | IV    | 475          |
| 002       | 002-I       | Ι     | 25           |

The stage I tree reference price is \$95.

Amount of protection  $_{\text{Tree}} = [(475 \text{ x } \$322) + (25 \text{ x } \$95)] \times 75\% =$ \$116,494

Amount of protection  $_{CTVE} = (475 \text{ x } \$352) \times 75\% = \$125,400$ 

The CTVE Amount of Protection includes only the stage-IV block. Stage-I blocks are not eligible for the CTVE.

- (b) For blocks in which less than 75% of the trees are the same stage, the insured must separate the blocks into stage-blocks and report the number of trees in each stage-block.
  - **Example 3:** The insured has one unit with 300 stage IV trees, 100 stage III trees, and 100 stage II trees (same planting pattern).

| Block No. | Stage-Block | Stage | No. of Trees |
|-----------|-------------|-------|--------------|
| 1         | 001-IV      | IV    | 300          |
| 1         | 001-III     | III   | 100          |
| 1         | 001-II      | II    | 100          |

The block must be reported as follows:

The insured elects a 75% coverage level. The tree reference prices are \$322 for stage IV, \$290 for stage III, and \$188 for stage II;

The maximum CTV reference prices are \$352 for stage IV, \$212 for stage III, and \$111 for stage II.

Amount of protection  $_{\text{Tree}} = (100 \text{ x } \$188) + (100 \text{ x } \$290) + (300 \text{ x}$  $\$322) \times 75\% = \$108,300$ 

Amount of protection  $_{CTVE} = (100 \text{ x } \$111) + (100 \text{ x } \$212) + (300 \text{ x}$  $\$352) \times 75\% = \$103,425$ 

(c) If the trees described in (b) were inter-planted, the three stage-blocks would be shown in the same location on the Grove Identification Map.

- (1) The PAW (PCT) is completed annually (self-certification allowed following year of application) and submitted by the acreage reporting date (See Exhibit 3 for completion instructions and sample worksheet.).
  - (a) The applicant/insured certifies:
    - (i) By stage block and type for each unit, the numbers and diameters of trees to be insured and the applicable stage, by completing a PAW (PCT); and
    - (ii) Other information contained on the PAW (PCT);
  - (b) The applicant/insured also provides a Grove Identification Map (shown in Exhibit 5 with completion instructions) that shows locations of the stage-blocks identified in the PAW (PCT);
  - (c) An amended or revised PAW must be completed if any changes have occurred since the original certification that would alter the stage-block designations or the numbers of trees in affected stage-blocks (e.g., periodic change changes, tree damage resulting in buckhorning, resetting, etc., removal/thinning of trees, etc.; See Exhibit 3 instructions); and
  - (d) The PAW triggers the need for a PAIR when the applicant/insured answers:
    - (i) Yes to whether "... damage (e.g. wind (tornado/hurricane, freeze, drought, etc.) occurred to trees that will reduce the insured crop's coverage from previous crop years?"
    - (ii) Yes to whether "…practices or production methods (e.g. removal or thinning; resetting, dehorning, grafting; or hedging or pruning) have been performed that will reduce the insured coverage from previous crop years?"

Applicable changes must be reported on the acreage report.

- (2) PAIR (PCT) (See Exhibit 4 for completion instructions and sample worksheet.)
  - (a) The PAIR (PCT) may be initiated at the AIP's discretion except that inspections and PAIR (PCT)s are required and must be completed on or before June 30:

\*\*\*

- (i) For new applications;
- (ii) For added insurable trees;
- (iii) If related to insurability determinations;
- (iv) For carryover policies when the insured transfers to a different AIP; or
- (v) When triggered by the PAW (PCT). [See paragraph 25(1)(c) of this handbook.]

- (b) Inspections and PAIR PCTs are required for carryover insureds:
  - (i) Prior to insurance attaching coverage against drought (see the SP and examples of drought damage in Exhibit 10, pictures 10-16);
  - (ii) If on the PAW (PCT), question 4 is answered "YES" or any of questions 5 9 on the PAW (PCT) are answered "NO". An inspection is required when KNOWN tree damage has occurred or cultural practices have been performed that will reduce the coverage of the insured crop and when the insured answers "YES" to related questions contained on the PAW (PCT); and
  - (iii) When spot checks are completed.
- (c) An inspection and PAIR may be initiated at the discretion of the AIP or RO, when trees are removed.
- (d) Key items the loss adjuster/inspector should consider in conducting the PAIR (PCT) are:
  - (i) Conditions identified in paragraph 21B and C of this handbook;
  - (ii) Tree count/type/stage by block;
  - (iii) Date of any removal or thinning; resetting, dehorning, grafting, hedging, pruning; or transitioning to organic; and
  - (iv) Whether the orchard is being maintained in a recommended manner with adequate tree spacing, no over-crowding or adjoining tree branches, good orchard floor management practice, etc.

#### \*\*\*

#### 26 Acceptable Records

#### A. Acceptable Records

Acceptable records may be requested at the time the PAIR (PCT) is completed or at loss adjustment to substantiate the tree counts, stages, and types reported by applicants/insureds. Such records may be required to resolve any discrepancy between the stage-blocks and types that were reported for the unit and the actual numbers, stages, and types of trees in the unit.

#### **B.** Record Types

The following types of records are acceptable, if the records indicate the location, number of trees, and planting dates [and other information required to establish insurability and stage the trees, e.g. year of dehorning, pruning, resetting (if resetting was required)], and insured type as designated in the SP:

(1) Planting records (orchard management records); and

(2) AIP recorded evidence, which includes pre-acceptance inspection reports, acreage reports, claims, and any other documentation of tree ages and dates of dehorning, pruning, or resetting (if resetting was required) that were used to establish insurance coverage for the trees.

## C. PAW PCT and Grove Identification Map

Insureds should be encouraged to obtain and use acceptable records to prepare the PAW (PCT) and Grove Identification Map. (See Exhibits 3 and 5.)

## D. Tree Numbers and Stage Determinations

- (1) A visual inspection is required to establish the insurable and uninsurable tree numbers, stages, and acres (while acreage of pecan trees is not used to establish insurance coverage, reported/determined acreage may be used to establish the number of trees in the unit; if used for this purpose, verification of the acreage is required). The inspection will be completed by a loss adjuster/inspector, who has been trained in procedures to determine the actual (determined) tree numbers, stages, and acres.
  - (a) If an inspection reveals no discrepancy between the unit arrangement and reported and actual number and stages of trees (and acres as applicable), the loss adjuster/inspector will check the "NO" box on the PAW (PCT) and sign and date the original worksheet submitted by the insured to verify that the information was found to be accurate. If previous crop year damage has occurred, verify that number of damaged or destroyed trees contained on any Appraisal and Production Worksheets for any previous crop year are reflected in the tree and stage numbers reported by the insured on the PAW PCT for the current crop year.
  - (b) If an inspection reveals a discrepancy in the unit arrangement or between the reported and actual number or stages of trees (and acres as applicable), AIPs will correct the PAW (PCT) (or complete a revised PAW) to establish the correct unit arrangement and the actual tree number or stages of trees in each unit. The loss adjuster/inspector will check the applicable box on the PAW to indicate the PAW was revised. Both the policyholder and the loss adjuster/inspector will sign the corrected/revised PAW. Revision of the Grove Identification Map may also be required. (Indicate on the Grove Identification Map any applicable revisions.) The loss adjuster/inspector will determine any necessary corrections by:
    - (i) For planted stands:
      - (A) Examining the records used by the insured to complete the PAW (PCT) worksheet and Grove Identification Map;
      - (B) Establishing the numbers of trees and stages with each block using the setting distances shown in Exhibit 6, Table B; or

- (C) Conducting a tree count for each stage within the block.
- (ii) For native stands (acreage with no distinguishable planting pattern):

See Exhibit 7 for plot sampling, tree count, and stage determination instructions.

- (A) Determine the number of acres in each block in the unit.
- (B) Select the minimum number of sample plots for each block as specified in Exhibit 6, Table B.
  - <u>1</u> Count and stage all insurable trees within each sample plot. Exclude any tree to which insurance did not attach.
  - $\underline{2}$  Total the number trees, by stage, for all sample plots for the block and divide the result by the number of sample plots to determine the average number of trees per sample plot for each stage-block.
  - 3 Multiply the result of (B)2) by the number of acres for the block to determine the number of trees for each stage-block. Enter the result for each separate stage-block on the PAW (PCT).
  - 4 Record all calculations on a Sample Plot Worksheet (see Exhibit 8) and place in the insured's file.

## 27 Unit Division

#### A. Basic Unit

A basic unit will be as defined in the BP.

#### **B.** Optional Units

Instead of establishing optional units by section, section equivalents, or FSA FN as specified in section 34 of the BP, units may be established if each optional unit is located on non-contiguous land.

## C. Enterprise Units

In addition to enterprise units as allowed in section 34 of the BP, an enterprise unit may be elected if the insured crop is located on at least two parcels of non-contiguous land and at least two of the parcels must contain at least the lesser of 20 acres or 20 percent of the insured crop acreage in the enterprise unit.

The following forms are required for the PCT program:

- A. Application
- **B.** Policy Change
- C. PAW (PCT)
- **D. PAIR** (**PCT**)
- E. Grove Identification Map
- F. Acreage Report

**29-30 (Reserved)** 

#### **31** Endorsements and Options

The PCT program has an endorsement and options that add supplemental coverage, exclude coverage, or otherwise modify the coverage.

## A. Occurrence Loss Option

An insured with a PCT policy in effect may elect to eliminate the deductible for determining indemnities for insured trees through the use of this option (where premium rates for the option are provided on the AD). The option applies to all insurable pecan trees in the county. The option is continuous and must be elected by the sales closing date for the crop year. The option may be cancelled in accordance with the cancellation provisions of the policy.

- (1) The insured may elect the OLO if he/she has not elected coverage under CAT.
- (2) An indemnity will be due under the OLO only if the amount of insured damage within all SDT identified as a result of the most recent cause of loss is at least two percent (2%) of the unit value (unless otherwise specified in the SP). The CP provides a five percent (5%) trigger when drought or failure or the irrigation water supply is a cause of loss.
- (3) The amount of the indemnity will be determined by:
  - (a) Multiplying the unit value by the applicable OLO trigger percent;
  - (b) Calculating the damage value;
  - (c) Multiplying the damage value by the coverage level selected by the insured to determine the amount of insured damage. If the amount of insured damage is equal to or greater than (3)(a), then;
  - (d) Multiplying the amount of insured damage by the URF; and
  - (e) Multiplying the result of (3)(c) times the share.
- (4) The total amount of indemnities payable on a unit during the crop year is limited to the lesser of the amount of protection for that unit or the unit value times the insured's share.

#### **B.** Comprehensive Tree Value Endorsement

The CTVE provides supplemental coverage for pecan trees in addition to the coverage provided by the CP.

(1) The insured may elect the CTVE for pecans if he/she has not elected coverage under CAT. The endorsement is continuous and must be elected by the SCD for the crop year. The endorsement may be cancelled in accordance with the cancellation provisions of the policy.

- (2) A CTVE indemnity will not be paid unless an indemnity is paid on the unit under the CP. All trees in all stage-blocks (except stage I) considered fully damaged or destroyed are eligible for an indemnity under this endorsement.
- (3) The CTV Amount of Protection (unit) will be determined by multiplying the number of insurable trees of each type reported by the insured in each insurable stage-block times the applicable maximum CTV reference price, by stage and type, adding these values, and then multiplying by the coverage level.
- (4) The CTV Unit Value will be determined by multiplying the number of insurable trees of each type in each insurable stage-block in the unit, as determined by the AIP, on the day before the loss (but not reduced for any insured damage that occurred during the crop year) by the applicable maximum CTV reference price for the stage and type, adding these values, and then multiplying by the coverage level.
- (5) The reference price offered under this endorsement is in addition to the tree reference price offered under the CP.

The CTV references prices may be based on actual records of sales of pecans (converted to a tree basis), provided:

- (a) Such records must:
  - (i) Be verifiable;
  - Be provided for all trees insured under the policy for the most recent four crop years (commingled records for insured and uninsured trees will be used if such records cannot be separated);
  - (iii) Be submitted by the applicable sales closing date contained in the actuarial documents; and
  - (iv) Show the dates of sale, the buyers' name and address, and the pounds and dollar amount sold.
- (b) All references in 5(c)(i) and (ii) to maximum and minimum CTV reference prices, average revenue value, and calculated results apply on a stage and type basis except as otherwise specified.
- (c) The maximum and minimum actual CTV reference prices will be determined as follows:
  - (i) For insurable acreage containing one stage of trees, the insured's maximum and minimum actual CTV reference prices will be the lesser of:
    - (A) The prices determined by:
      - Dividing the dollar amount of sales reported by the insured by the number insurable trees under the insured's policy (see section 7(a)(2) for commingled records) for each crop year and rounding the result to two decimal places;

- <u>2</u> Adding the results of (c)(i)(A) and dividing by four (4);
- <u>3</u> Rounding the result of (c)(i)(A) to two decimal places to determine the average revenue value;
- <u>4</u> Dividing the result of  $(c)(i)(A)\underline{3}$  by the reference revenue value for the stage;
- 5 Dividing the applicable maximum and minimum CTV reference prices contained in the actuarial documents by 0.60 and rounding the results to two decimal places;
- <u>6</u> Multiplying the unrounded results of (c)(i)(A) by the results of (c)(i)(A) is and
- <u>7</u> Rounding the results of  $(c)(i)(A)\underline{6}$  to nearest whole dollar; or
- (B) The prices determined by multiplying the applicable maximum and minimum CTV reference prices contained in the actuarial documents by 1.833 rounded to the nearest dollar.
- (ii) For insurable acreage containing two or more stages of trees, the insured's maximum and minimum actual CTV reference prices for each stage will be the lesser of:
  - (A) The prices determined by:
    - Dividing the gross sales reported by the insured by the number insurable trees under the insured's policy (see section 7(a)(2) for commingled records) for each crop year and rounding the result to two decimal places;
    - 2 Adding the results of (b)(ii)(A)1 and dividing by four (4) and rounding the result to two decimal places;
    - <u>3</u> Multiplying the result of (c)(ii)(A)<u>2</u> times the applicable factor for each stage shown in the table below;

| Stage:           | II   | III  | IV    | V     |
|------------------|------|------|-------|-------|
| Stage<br>Factor: | .433 | .888 | 1.039 | 1.689 |

- <u>4</u> Rounding the result of (c)(ii)(A)<u>3</u> to two decimal places to determine the average revenue values;
- 5 Dividing the results of (c)(ii)(A) by the reference revenue value for the stage;
- <u>6</u> Dividing the applicable maximum and minimum CTV reference prices contained in the actuarial documents by 0.60 and rounding the results to two decimal places;

- <u>7</u> Multiplying the unrounded results of (c)(ii)(A)5 by the applicable results of (c)(ii)(A)6; and
- <u>8</u> Rounding the results of (c)(ii)(A)<u>7</u> to nearest whole dollar for each stage; or
- (B) The prices determined by multiplying the applicable maximum and minimum CTV reference prices contained in the actuarial documents by 1.833 rounded to the nearest dollar.

## **Example:**

The pecan orchard contains 1000 insurable improved variety trees consisting of stage II, III, and V trees. The insured provides the most recent four years of acceptable sales records.

The average gross sales per tree are:

Crop Year

| 2015             | \$95.25         |
|------------------|-----------------|
| 2014             | \$142.85        |
| 2013             | \$130.95        |
| 2012             | <u>\$110.95</u> |
| Avg. Gross Sales | \$120.00        |

The average revenue value for each stage is:

| Stage II | [:         | $120.00 \times .433$ (stage factor) =  | \$51.96  |
|----------|------------|--|----------|
| Stage II | []:        | \$120.00 × .888 (stage factor) =       | \$106.56 |
| Stage V  | <i>'</i> : | $120.00 \times 1.689$ (stage factor) = | \$202.68 |

|  |          | CTV reference prices |         |  |
|--|----------|----------------------|---------|--|
| The reference revenue value for each stage is: |          | Minimum              | Maximum |  |
| Stage II:                                      | \$34.10  | \$78                 | \$102   |  |
| Stage III:                                     | \$79.43  | \$177                | \$212   |  |
| Stage V:                                       | \$232.46 | \$455                | \$471   |  |

The maximum and minimum actual CTV reference prices for each stage are:

| Preliminary maximum   | actual |   |             |
|-----------------------|--------|---|-------------|
| CTV reference price   | =      | Stage II = $$259 = {(\$51.96 \div \$34.10) \times (\$102 \div 0.60)}$ | )}          |
|                       |        | Stage III = $474 = \{(106.56 \div 79.43) \times (212 \div 0.60)\}$    | ))}         |
|                       |        | Stage V = $684 = \{(202.68 \div 232.46) \times (471 \div 0.66)\}$     | ))}         |
| Final m <u>aximum</u> |        |   |             |
| actual CTV            | =      | Stage II = $$187$ {the lesser of the preliminary price $$2$ .         | 59 or       |
| reference price       |        | $187 (102 \times 1.833)$  |             |
|                       |        | Stage III = $389$ {the lesser of the preliminary price $44$           | 74 or \$389 |
|                       |        | $($212 \times 1.833)$   |             |
|                       |        | Stage V = $684$ {the lesser of the preliminary price $66$             | 84 or \$863 |
|                       |        | (\$471 × 1.833)}  |             |
| January 2017          |        | FCIC-20300U   | 19          |
|                       |        |   |             |

| <u>Preliminary minimum actual</u><br><u>CTV reference price</u> =   |  | $\begin{array}{ll} \underline{1 \ actual} \\ = & \mbox{Stage II} = \$198 \ (\$51.96 \div \$34.10) \times (\$78 \div 0.60) \\ & \mbox{Stage III} = \$396 \ (\$106.56 \div \$79.43) \times (\$177 \div 0.60) \\ & \mbox{Stage V} = \$661 \ (\$202.68 \div \$232.46) \times (\$455 \div 0.60) \\ \end{array}$   |  |
|---|--|--|--|
| <u>Final minimum</u><br><u>actual CTV</u><br><u>reference price</u> |  | $= Stage II = $143 \{the lesser of the preliminary price $198 or $143 ($78 \times 1.833) \}$<br>Stage III = \$324 {the lesser of the preliminary price \$396 or \$324 (\$177 \times 1.833) }<br>Stage V = \$661 {the lesser of the preliminary price \$661 or \$834 (\$455 \times 1.833) }   |  |
| (c)   | In addition to requirements of section 6 of the CP, the insured must report the insured's maximum and minimum actual CTV reference prices by stage-block for each unit.  |  |  |
| (d)   | The Summary of Revenue History form contained in the CIH, Exhibit 20E will<br>be used to record the actual sales records reported by the insured. See examples<br>in Exhibit 9 of this handbook for reporting actual records of sales and<br>calculation of the Average Revenue Value. The following instructions replace<br>the applicable instructions contained in the Exhibit 20E. |  |  |
|   | (i)  | Only four years of records will be reported on the Summary of Revenue History form.  |  |
|   | (ii)   | Complete all heading entries for the insured's policy for the insured county; except MAKE NO ENTRY for FSA FN, legal description, and practice, insurable or uninsurable, and number of trees. Strike out UNIT NUMBER and replace with STAGE(S) AND TYPE OF TREES.   |  |
|   | (iii)  | Complete entries for columns 1, 2, 3, 4, and 5.  |  |
|   | (iv)   | Strike out "NET ACRES" in column 2 and replace with NO. OF TREES.<br>Separate records for insurable and uninsurable trees may be provided but<br>are not required. If applicable, make two line entries for each crop year on<br>the form. Only the production and sales from the insurable trees will be<br>used to calculate the AVERAGE GROSS SALES PER TREE. If separate<br>records are not provided, the AVERAGE GROSS SALES PER TREE will<br>be based on the commingled production and sales from all trees in the<br>insured county for the policy. |  |
|   | (v)  | Revise the heading in column 5 to AVERAGE GROSS SALES PER<br>TREE. The entry in column 5 will be the result of dividing column 4 by<br>the number of insured trees (including uninsured trees if production and<br>sales are commingled) rounded to two decimal places.  |  |
|   | (vi)   | MAKE NO ENTRY in column 6.   |  |

- (vii) Strike out "ACRE" in item 8 and replace with "TREE".
- (viii) Strike out "APPROVED and PER ACRE and replace with AVERAGE REVENUE VALUE. The entry in item 9 will be the result of dividing item 8 by item 7, rounded to two decimal places.
- (e) The CTV (actual) reference prices based on actual sales records will be updated on a two-year basis to reflect the most recent two years of sales records. The earliest two years of the four-year period will be removed and the most recent two years will be added to compute the four-year average actual sales value per tree.
- (f) The CTV (actual) references prices will be reported on the acreage report.
- (6) If the insured elects both the OLO and the CTVE, the OLO will apply to the CTVE.
- (7) The coverage level elected by the insured for the PCT policy will apply to the endorsement.
- (8) An insured tenant or operator must have a lease with the owner of the pecan orchard that requires him or her to maintain the pecan orchard using accepted tree management practices. The lease agreement must clearly state the tenant or operator is entitled to his or her insured share of any indemnities under the CP. A copy of the lease must be on file with the AIP at the time insurance attaches.

## C. High Risk Land Exclusion Option

This option is available for pecan trees on any land identified in the AD as high risk and allows the insured to exclude land identified as high risk in accordance with section 3(b)2 of the BP.

#### 32-40 (Reserved)

# Acronyms

The following table contains RMA-approved acronyms used in this handbook.

| Approved Acronyms | Term  |  |
|-------------------|---|--|
| AD                | Actuarial Documents                                     |  |
| AIP               | Approved Insurance Provider                             |  |
| ARD               | Acreage Reporting Date                                  |  |
| BP                | Common Crop Insurance Policy Basic Provisions           |  |
| CAT               | Catastrophic Risk Protection Endorsement                |  |
| CD                | Cancellation Date                                       |  |
| CIH               | FCIC-18018 Crop Insurance Handbook                      |  |
| CISH              | Crop Insurance Standards Handbook                       |  |
| СР                | Crop Provisions   |  |
| CTV               | Comprehensive Tree Value                                |  |
| CTVE              | Comprehensive Tree Value Endorsement                    |  |
| DSSH              | FCIC-24040 Document and Supplemental Standards Handbook |  |
| FCIC              | USDA Federal Crop Insurance Corporation                 |  |
| FN                | Farm Number   |  |
| FSA               | Farm Service Agency                                     |  |
| LAM               | Loss Adjustment Manual                                  |  |
| LASH              | Loss Adjustment Standards Handbook                      |  |
| OLO               | Occurrence Loss Option                                  |  |
| PAIR              | Pre-Acceptance Inspection Report                        |  |
| PAW               | Producer's Pre-Acceptance Worksheet                     |  |
| РСТ               | Pecan Tree  |  |
| RMA               | USDA Risk Management Agency                             |  |
| SBI               | Substantial Beneficial Interest                         |  |
| SCD               | Sales Closing Date                                      |  |
| SDT               | Stand(s) of Damaged Trees                               |  |
| SP                | Special Provisions of Insurance                         |  |
| UG                | Underwriting Guide                                      |  |
| URF               | Underreport Factor                                      |  |

## Definitions

<u>Adjustment factor</u> means a factor contained in the Special Provisions for the applicable stage and restoration method (RM3 and RM4) used to determine the percent of damage and damage value of fully and partially damaged trees for purposes of determining an indemnity.

<u>Amount of insured damage</u> means the dollar amount determined by multiplying the damage value times the coverage level.

<u>Amount of protection</u> means the dollar amount for the unit calculated by multiplying the number of insurable trees reported by the insured in each stage-block in the unit times the applicable tree reference price for the stage and restoration method (RM1 or RM2), totaling these values, and then multiplying this result times the coverage level selected by the insured.

<u>Average revenue value</u> means the value per tree for each applicable stage as determined in section 7(b) and (c) of the CTV endorsement.

Block means a stand of trees of:

- (a) A pecan variety or varieties or seedling pecans on acreage sharing a common boundary with no discernible change in the planting pattern; or
- (b) Native pecans sharing a common boundary without regard to any planting pattern.

Budding means grafting a single scion bud onto the rootstock (trunk or limb) to form a bud union.

Bud union means the location where a scion bud is grafted onto the rootstock of another tree.

<u>Commercial orchard</u> means an orchard which is managed in accordance with good farming practices performed on an annual basis such as fertilization, disease, insect, and weed control for the purposes of selling the pecan production to a wholesale or retail market.

<u>CTV amount of insured damage</u> – means the dollar amount determined by multiplying the CTV damage value times the coverage level.

<u>CTV amount of protection</u> means the dollar amount (by unit) calculated by multiplying the number of insurable trees reported by the insured in each stage II-V block times the applicable maximum CTV reference price for the stage, adding these values, and then multiplying the result times the coverage level selected by the insured.

<u>CTV damage value</u> means the dollar amount determined by multiplying the actual number of destroyed trees and the actual number of fully damaged trees in each stage II through stage V-block in all the stands of damaged trees (SDT) identified as a result of the most recent cause of loss times the applicable CTV reference price, and then adding these values. The applicable CTV reference price will be the maximum CTV reference price for trees destroyed and the minimum CTV reference price for trees fully (100-percent) damaged.

<u>CTV underreport factor (URF)</u> means a factor determined by us (by unit) and used to adjust your CTV indemnity in Section 11(b)(2) when you have underreported the number of insurable trees. The factor is the result of dividing the CTV amount of protection by the CTV unit value, rounded to three decimal places, not to exceed 1.000.

<u>CTV unit deductible</u> means the dollar amount determined by multiplying the actual number of insurable trees in each stage II- through stage V-block in the unit on the day before the loss (but not reduced for any insured damage that occurred during the crop year) times the maximum CTV reference price, adding these values, and then multiplying the result times the deductible.

<u>CTV unit value</u> means the amount determined by multiplying the number of actual insurable trees in each stage II- through stage V-block in the unit, as determined by us, on the day before the loss (but not reduced for any insured damage that occurred during the crop year) times the maximum CTV reference price for the stage, adding these values, and then multiplying the result times the coverage level selected by you.

<u>Damage value</u> means the dollar amount determined:

- (a) For destroyed trees by multiplying the actual number of insurable trees in each stage-block within the stand of damaged trees damaged due to the most recent cause of loss times the applicable tree reference price for the stage and restoration method (RM1 or RM2) and multiplying each result times the percent of damage determined in accordance with section 13(d) for each stage-block and totaling these values for all the stage blocks within the unit; and
- (b) For fully and partially damaged trees by multiplying the actual number of insurable trees in each stage-block within the stand of damaged trees damaged due to the most recent cause of loss times the RM1 tree reference price for the stage and multiplying each result times the percent of damage determined in accordance with section 13(d) for each stage block and totaling these values for all stage blocks within the unit.

Dead means a tree with no live limbs (includes all scaffold limbs and attached limbs).

<u>Dehorn (dehorning)</u> means to cut back scaffold limbs to within two to four feet of the trunk (or trunks if the tree has multiple trunks) in an attempt to rehabilitate the tree.

## Destroyed tree means:

- (a) For damage due to insured causes of loss, any insurable tree that:
  - (1) Is dead or dying;
  - (2) For stage I III, is a tree that is toppled or leaning and the insured and AIP agree that reset is not practical;
  - (3) For stage IV V, a tree that is toppled or leaning;
  - (4) Is missing; or
  - (5) Is damaged to the extent that insured and AIP agree that rehabilitation is not practical.
- (b) Destroyed trees are considered 100 percent damaged.
- (c) See section 13(d) and (h) for determining the percent of damage for destroyed trees.

<u>Die-back</u> means a condition where the limbs in the upper portion of the tree (terminals) are dead (no new growth occurring along these limbs).

#### FCIC-20300U

<u>Dying</u> means for purposes of determining insurable damage due to drought or the failure of the irrigation water supply due to an insurable cause, a tree in which:

- (a) At least one-third  $(\frac{1}{3})$  of the upper tree canopy is dead as evidenced by die-back;
- (b) There are dead scaffold limbs with the majority of any new growth, if any, located along the trunk or scaffold limbs; or
- (c) A combination of (a) and (b).

<u>Fully damaged tree</u> means an insurable tree that is damaged and requires rehabilitation (dehorning) or reset but is not destroyed. Such tree will be considered 100 percent damaged. See section 13(d) and (h) for determining the percent of damage for fully damaged trees.

<u>Grafting</u> means creating a permanent union between two trees by inserting a scion into the rootstock (root, trunk, or limb) of another tree.

Graft union means the location where the scion is joined to the rootstock of another tree.

<u>Hedging</u> means a standard pruning practice conducted on an annual or periodic basis to remove vegetative growth from the tree canopy to improve production and prevent overcrowding of pecan trees.

Leaning means a tree that is leaning more than 10 degrees from the upright position.

<u>Limb adjustment percentage</u> means the percentage of normal limb breakage contained in the Special Provisions and used to determine the percent of damage for partially damaged trees.

<u>Maximum actual CTV reference price</u> means the price per tree, by stage, determined in accordance with section 7 of this endorsement that is used in calculating the CTV unit value, the CTV amount of protection, and the portion of the CTV damage value for destroyed trees for the CTV endorsement.

<u>Minimum actual CTV reference price</u> means the price per tree, by stage, determined in accordance with section 7 of this endorsement that is used in calculating the portion of the CTV damage value for fully (100-percent) damaged trees for the CTV endorsement.

<u>Maximum CTV reference price</u> means the price per tree, by stage, contained in the actuarial documents for CTV that is used in calculating the CTV unit value, the CTV amount of protection, and the portion of the CTV damage value for destroyed trees for the CTV endorsement.

<u>Minimum CTV reference price</u> means the price per tree, by stage, contained in the actuarial documents for CTV that is used in calculating the portion of the CTV damage value for fully (100-percent) damaged trees for the CTV endorsement.

<u>Native tree</u> means a pecan tree contained in a commercial orchard that has generally grown from a seed that fell from a tree in a naturally occurring pecan orchard (grove), without being planted or set out.

<u>Occurrence loss option</u> means an option that may be elected by the insured that eliminates the unit deductible in accordance with section 15 of the Crop Provisions.

<u>Orchard</u> means contiguous acreage of pecan trees within a common boundary containing one or more blocks. Acreage separated by only a public or private right-of-way, waterway, or an irrigation canal will be considered as contiguous.

<u>Partially damaged tree</u> means an insurable tree that requires rehabilitation (pruning but not dehorning) for which the percent of tree canopy damage is greater than 10 percent. See section 13(d) and (h) for determining the percent of damage for partially damaged trees.

<u>Percent of damage</u> means a percentage expressed as a decimal rounded to two decimal places and determined in accordance with section 13(d) and (h).

<u>Prune (pruning)</u> means the removal of limbs damaged by insured causes of loss from the tree canopy (excludes dehorning and hedging) resulting in a reduced canopy size.

<u>Reference revenue value</u> means the value per tree, by stage, listed on the prices tab contained in the actuarial documents for CTV that is used in calculating the actual CTV (minimum/maximum) reference prices for producers using their actual records of production and sales.

<u>Rehabilitation (rehabilitate)</u> means the pruning of limbs or dehorning trees damaged by insured causes of loss in an attempt to remove the damaged areas and allow the tree to recover. Excludes hedging and annual pruning conducted as part of a standard tree management practice.

<u>Removal/replacement cost factor</u> means a factor contained in the Special Provisions used to calculate the portion of indemnity for native trees that is due upon the initial completion of the claim and the remaining portion of the indemnity that is due upon set out of replacement trees in accordance with section 13(i) of these Crop Provisions.

Remove (removing, removal) means the taking the entire tree including the roots out of the orchard.

<u>Replace (replaced, replacing, replacement)</u> means to cut the tree down leaving the stump and taking the remaining portion of the tree out of the orchard.

<u>Replacement (transplant) tree</u> means a tree set out in an existing orchard in the same location of a damaged tree that cannot be rehabilitated, reset, or is otherwise destroyed and that has been removed or replaced.

<u>Reset</u> means restoring a toppled or leaning tree to approximately the same position the tree occupied before it was caused to topple or lean, and carrying out the cultural practices necessary to restore the tree. Reset is applicable only for stage I - III trees.

<u>Restoration method</u> means one of the methods listed below used by the insured to rehabilitate or reset damaged trees or remove/replace destroyed trees:

- (a) Restoration Method 1 (RM1) Removing the tree and setting out a replacement tree in its place;
- (b) Restoration Method 2 (RM2) Replacing the tree by cutting it down and leaving the stump, then setting out a replacement tree beside the stump;
- (c) Restoration Method 3 (RM3) Rehabilitation; or
- (d) Restoration Method 4 (RM4) Reset (stages I III only).

<u>Sales closing date</u> means in lieu of the definition in section 1 of the Basic Provisions, the sales closing date for the crop year and subsequent crop years will be May 15 unless another date is provided in the Special Provisions.

Seedling tree means a pecan tree that develops from a planted pecan seed (nut).

<u>Sequentially thinning (thin)</u> means a method of systematically removing or replacing pecan trees for the purpose of improving sunlight penetration and maintaining the proper spacing necessary for continuous production.

<u>Set out (setting out)</u> means transplanting a tree into the orchard.

<u>Share</u> (contained in the CP) means in addition to the definition in section 1 of the Basic Provisions, an insured tenant or operator must have a lease with the owner of the pecan orchard that requires him or her to maintain the pecan orchard using accepted tree management practices. The lease agreement must clearly state the tenant or operator is entitled to his or her insured share of any indemnities under these Crop Provisions. A copy of the lease must be on file with the AIP at the time insurance attaches. However, only for the purpose of determining the amount of indemnity, the insured's share will not exceed the insured's share at the time of loss.

<u>Share (contained in the CTVE)</u> means in addition to the definition in section 1 of the Crop Provisions, an insured tenant or operator for purposes of this endorsement, must have a long-term lease of not less than 5 years beyond the current crop year that requires him or her to maintain the pecan orchard using accepted tree management practices including complying with the requirements of this endorsement. The lease agreement must clearly state the tenant or operator is entitled to his or her insured share of any indemnities under this endorsement. A copy of the lease must be on file with the AIP at the time insurance attaches. However, only for the purpose of determining the amount of indemnity, the insured's share will not exceed the insured's share at the time of loss.

<u>Stage</u> means a tree-classification system based on tree diameter or the number of crop years remaining after pruning or dehorning.

(a) The stage at the beginning of the crop year for each insurable tree in the unit is:

| Trunk Diameter and Stage at<br>the Beginning of the Crop Year |                   | Number of Crop Years Remaining at the Reduced Stage After the<br>Crop Year of Pruning <sup>1</sup> or Dehorning |                    |                  |                    |
|---|-------------------|---|--------------------|------------------|--------------------|
|   |                   | Pruning   |                    | Dehorning        |                    |
|   |                   | Reduced Stage   | Years <sup>2</sup> | Reduced<br>Stage | Years <sup>2</sup> |
| Inches  | Original<br>Stage |   |                    |                  |                    |
| $\leq 6$  | Ι                 | Ι   | 1                  | Ι                | 3                  |
| 6.01-10.0   | II                | Ι   | 1                  | Ι                | 4                  |
| 10.01-15.0  | III               | II  | 2                  | Ι                | 5                  |
| 15.01-20.0  | IV                | II  | 2                  | II               | 5                  |
| >20.0   | V                 | III   | 3                  | III              | 5                  |

<sup>1</sup>See (b) of this definition <sup>2</sup>Crop Years Remaining

Example: A tree that is 14 inches in diameter is in stage III.

If the tree is dehorned in the 2018 crop year, the tree will be reduced to a stage I tree for the 2019 - 2023 crop years (5 crop years remaining after the crop year of dehorning.). For the 2024 crop year, the stage will be determined based on the tree diameter applicable for the crop year (i.e. if the tree diameter increased to 19.25 inches, the tree would be in stage IV).

- (b) Insurable trees that have been spaded and relocated will be considered pruned for purposes of determining the reduced tree stage and crop years remaining when establishing the insured's insurance coverage.
- (c) Insurable trees that are damaged to the extent they require rehabilitation will be staged based on the rehabilitation practice that is required regardless of whether the trees are rehabilitated.

<u>Stage-block</u> means a block in which at least 75 percent of the trees are the same stage at the time insurance attaches.

<u>Stand of damaged trees</u> means the area or areas within a unit where damage due to the same insurable cause of loss occurs, as established by the AIP for the crop year, and is used to determine the damage value for the unit. If distinct areas of damaged trees within the unit cannot be established, the stand of damaged trees will be the entire unit.

Toppled (topple) means a tree that is no longer upright with an exposed root system.

<u>Tree reference price</u> means the price per tree, by stage and restoration method listed on the actuarial documents for removing or replacing a tree (RM1 and RM2).

<u>Trunk diameter</u> means the diameter of the trunk based on standard measurement practices applicable for pecan trees and contained in our approved procedures.

<u>Type</u> means a grouping of similar pecan varieties or native and seedling pecan trees contained in the Special Provisions established to recognize differences in insurance risk or different tree reference prices under the Comprehensive Tree Value Endorsement.

<u>Undamaged tree</u> means a tree that does not require rehabilitation, reset, or have to be removed or replaced.

<u>Underreport factor (unit)</u> means a factor determined by the AIP and used to adjust the insured's indemnity in section 13(a) of these Crop Provisions when the insured has underreported the number of insurable trees. The factor is the result of dividing the amount of protection by the unit value, rounded to three decimal places, not to exceed 1.000.

<u>Unit deductible</u> means the dollar amount determined by multiplying the actual number of insurable trees in each stage-block in the unit on the day before the loss (but not reduced for any insured damage that occurred during the crop year) times the applicable tree reference price for the stage and restoration method RM1 or RM2, as applicable, totaling these values, and multiplying this result times one (1) minus the coverage level.

<u>Unit value</u> means unless otherwise specified on the actuarial documents, the amount determined by multiplying the actual number of insurable trees in each stage-block in the unit, as determined by the AIP, on the day before the loss (but not reduced for any insured damage that occurred during the crop year) times the applicable tree reference price for the stage and restoration method, RM1 or RM2, as applicable, totaling these values, and then multiplying this result times the coverage level selected by the insured.

<u>Variety (improved)</u> means a variety/cultivar of pecan trees that is developed as a controlled cross or by grafting or budding.

Once the initial certification (worksheet and Grove Identification Map) has been provided, insureds who continue insurance coverage in subsequent crop years will be allowed to self-certify in the remarks section of the original pre-acceptance worksheet that no change has occurred. The insured will write "No change for XXXX Crop Year," initial, and date.

If any changes have occurred since the original certification that would alter the stage-block designations or the numbers of trees in each stage-block (e.g., periodic stage changes, tree damage resulting in buckhorning, resetting, removal/thinning of trees, etc.), an amended or revised worksheet and aerial photo(s), maps (e.g. GPS), or Grove Identification Map must be completed for any blocks of trees affected by the change. The nature and date of the revisions or amendments should be noted in the remarks section. Applicable changes must be reported on the acreage report and a new PAIR (PCT) may be required.

| ELEMENT             | <b>REQUIRED INFORMATION</b>   |  |  |
|---------------------|---|--|--|
| Applicant/Insured's | Enter the name of the applicant or insured as it appears on the application for   |  |  |
| Name                | insurance.  |  |  |
| Policy No.          | Enter the policy number from the most recent Policy Confirmation. In the case of a new applicant, enter only the 2-digit state and 3-digit county code, e.g. XX-XXX.  |  |  |
| County              | Enter the name of the county in which the trees are located.  |  |  |
| State               | Enter the name of the state in which the trees are located.   |  |  |
| Сгор                | Enter the applicable crop name.   |  |  |
| Crop Year           | Enter the crop year for which the worksheet is being completed.   |  |  |
| Unit Number         | Enter the unit number as 00010000BU, 00010000EU, or 00010001OU from the Grove Identification Map. Basic, optional, and enterprise units are allowed as defined in the CP.   |  |  |
| Block Number        | By line, enter the block number for each separate block as identified on a Grove Identification Map and an aerial photo(s) (e.g. FSA) or satellite imagery (e.g. GPS, Google). Separate line entries within a block are required if different types, practices, stages, etc. apply.<br>Enter the block number to the third decimal place (e.g. 001).<br>A block is a stand of trees of a variety or varieties, native trees or seedling trees on acreage sharing a common boundary with no discernible change in planting pattern (a homogenous planting pattern) except that a block of native pecan trees will be that acreage sharing a common boundary without regard to any planting pattern.<br>If there is a change in planting pattern that distinguishes areas within the block (e.g. a planted stand and a native stand), the insured can list these areas as separate blocks on the PAW (PCT).<br>A block may contain different stages (based on tree diameter, e.g. stage I - $\leq$ 6.0 in.; stage V -> 20.0 in.), types, practices, and other PAW (PCT) elements. In these instances, separate line entries within the block will apply and will be numbered the same on each line, e.g. the block contains three different stages; each separate stage line would be assigned the same block number. |  |  |
| ELEMENT   | <b>REQUIRED INFORMATION</b>  |
|---|--|
| Block Number<br>(Continued)   | If acreage of trees of different varieties, native trees, seedling trees, or stages<br>within the block can be separately plotted, the acreage within the block<br>should be drawn out within the block on the Grove Identification Map and an<br>aerial photo(s) (e.g. FSA) or satellite imagery (e.g. GPS, Google).  |
| Legal Description<br>Section-Township-<br>Range- Other Land<br>Identifier (e.g.<br>Spanish land<br>grants, metes and<br>bounds, etc.) | Enter the section, township and range for each block location, or other descriptions if rectangular survey is not applicable. This may include GPS coordinates or other land identification.<br>If additional space is needed, attach a supplemental sheet.  |
| FSA Farm/Tract/<br>Field Number   | FSA Farm/Tract/Field number is optional unless units are based on FSA FN, then the FSA FN is required.   |
| Acres   | Enter the acres occupied by the block, rounded to the nearest tenth (acres may be established using the total trees (by line) and Exhibit 6, Table A).   |
| Insurable or<br>Uninsurable Block<br>(Orchard)  | <ul> <li>Designate whether the block (orchard containing more than one block) has met insurability requirements. Enter I for insurable and UI for uninsurable (enter on the first line only if the entire block is uninsurable. Explain any UI entry in the Remarks section and identify on a Grove Identification Map and an aerial photo(s) (e.g. FSA) or satellite imagery (e.g. GPS, Google). If multiline entries apply for the block, enter I or UI on a line basis.</li> <li>If the block or any individual line entry is uninsurable, do not complete the remaining column entries on the worksheet for the block or the line entry.</li> <li>Blocks (orchard) must be reported as uninsurable when:</li> <li>(a) The orchard (see definition) does not contain the minimum number of acres or the block does not contain the minimum number of trees per acre specified in the SP (the acre determination is made on an orchard basis, not a block basis);</li> <li>(b) At least 25% of the trees in the block have been planted at a depth below the depth grown in the nursery or where the graft union is below the soil surface;</li> <li>(c) At least 25% of the acreage is subject to poor drainage/ponding of water;</li> <li>(d) The commercial orchard (or block) is not managed for the production of pecan production to be sold for human consumption.</li> <li>Refer to the policy provisions, the actuarial document(s), and paragraph 21B and C of this handbook for complete information for the conditions for determining insurable and uninsurable blocks (orchards).</li> </ul> |
| Total Acres<br>Measured by AIP  | If the AIP measures the acreage in the block, enter the measured acres. Enter $N/A$ if not applicable  |
| Variety –<br>Improved, Native,<br>Seedling, or Mixed  | Enter the variety name, native, seedling, or mixed (if the block contains improved, native, or seedling pecan trees.   |

| ELEMENT  | <b>REQUIRED INFORMATION</b>  |  |  |  |  |  |
|--|--|--|--|--|--|--|
| Type (Group)   | Enter the insured type as specified in the SP. Insurable improved varieties are listed in 3 groups for each insurance county – Groups I, II, and III. Native and seedling pecan trees are contained in Group IV and V, respectively. See the SP.   |  |  |  |  |  |
| Practice   | Designate if the block is irrigated or non-irrigated, certified organic (Irr. or NIrr.) or acreage transitioning to organic (Irr. or NIrr.).   |  |  |  |  |  |
| Crop Year of Set<br>Out (Improved or<br>Seedling– Stage I<br>only) | Required for improved variety/seedling stage I trees only - enter the crop year<br>of set out based on the month and year of set out. If the trees were set out in<br>different crop years, enter each set out year on a separate line for the block.<br>If at least 75 percent of the trees were set out in the same crop year, make a<br>one-line entry (note in the Remarks section). Enter N/A if not applicable.<br>(Crop year of set out is required to determine insurability of stage 1 trees and<br>the initial and ending crop year freeze damage is considered an insured cause |  |  |  |  |  |
|  | of loss.)  |  |  |  |  |  |
| Crop Year of Reset<br>(Stage I – III only)                         | Enter set out information for other stages in the Remarks section, if Rhown.<br>Enter the crop year of reset based on the month and year of reset. If different<br>crop years apply for the block, enter on separate lines. If at least 75 percent<br>of the trees were set out in the same crop year, make a one-line entry (note in<br>the Remarks section). Enter N/A if not applicable.  |  |  |  |  |  |
|  | (Reset for loss adjustment purposes only applies to stage I – III trees)   |  |  |  |  |  |
| Crop Year of<br>Dehorning,<br>Pruning, or<br>Hedging               | Enter the crop year of dehorning, pruning, or hedging in which the practice was applied. If different crop years apply for the block, enter on separate lines. Enter N/A if not applicable.  |  |  |  |  |  |
| Tree Spacing   | Enter if available for native pecan acreage, otherwise, enter "varying".<br>Required for improved varieties and seedling trees. Enter the average tree<br>spacing (in feet) or pattern within the block (e.g. 20 X 30).<br>Example: If trees are being interplanted as a part of a tree replacement  |  |  |  |  |  |
|  | 12.5 ft. X 20 ft.  |  |  |  |  |  |
| Planting Pattern <sup>2</sup><br>S, B, Q, H,<br>D, O               | Enter:<br>"S" for Square Planting Pattern<br>"B" for Hedgerow or Border Planting Pattern<br>"Q" for Quincunx Planting Pattern<br>"H" for Hexagonal Planting Pattern<br>"D" for Double Row Planting Pattern<br>"O" for Other Planting Pattern   |  |  |  |  |  |
| Number of Trees  | Enter the total number of insurable trees in the block. If multiline entries have been made for the block, enter total number of trees on the first line only. Enter an estimate (identify as "Est") if accurate determination is impractical. If the producer estimates the tree number, the loss adjuster/inspector must verify the accuracy of the estimate (see paragraph 26D for additional instructions). Refer to the policy provisions, the actuarial document(s), and paragraph 21 of this handbook for determining insurable and uninsurable trees.                              |  |  |  |  |  |

| ELEMENT                      | REQUIRED INFORMATION  |  |  |  |  |  |  |
|------------------------------|---|--|--|--|--|--|--|
|                              | Designate the number of uninsurable trees within the block.   |  |  |  |  |  |  |
| Uninsurable Trees            | Trees must be reported as uninsurable (for example) when:   |  |  |  |  |  |  |
|                              | <ul> <li>(a) Stage I variety and seedling trees have not reached the second crop after set out (native trees with a minimum 3 inch diameter) unless at least 75 percent of the trees in the block have reached the second crop year after set out (if so, all stage I trees in the block would be insurable); or</li> </ul>   |  |  |  |  |  |  |
|                              | (b) Trees are intended to be sequentially thinned during the current crop year;<br>Refer to the paragraph 21B and C of this handbook, the CP, SP, or the<br>actuarial document(s) for complete information for determining insurable<br>and uninsurable trees.  |  |  |  |  |  |  |
|                              | Explain any uninsurable tree entry for a block in the Remarks section.<br>Identify on a Grove Identification Map and an aerial photo(s) (e.g. FSA) or<br>satellite imagery (e.g. GPS, Google).  |  |  |  |  |  |  |
| Stage and Number<br>of Trees | <ul> <li>Enter each stage (I through V, based on the tree diameter or reduced stage if the trees have been dehorned or pruned – see stage definition in the CP and Exhibit 2 of this handbook) and number of trees in the stage on separate lines of the worksheet. If multiple line entries apply, enter the stage and number of trees for each line.</li> <li>If the trees have been dehorned or pruned, the stage will be based on the number of crop years remaining following the practice (see the stage definition).</li> <li>If at least 75 percent of the block has been dehorned or pruned, the entire block would be listed in the applicable stage with the number of trees in the block. (See Stage-Block Number instructions below.)</li> <li>Separate line entries for trees that have been reduced in stage due to dehorning or pruning for a block are identified in the Remarks section. If such trees are primarily located in an area of the block, identify the area, number of trees, and stage on a Grove Identification Map and an aerial photo(s) (e.g. FSA) or satellite imagery (e.g. GPS, Google). If such trees are randomly located in the block, explain in the Remarks section and list the row number on the aerial</li> </ul> |  |  |  |  |  |  |
| Percent of Trees             | photo or satellite image and the number of trees and stage(s) in each row.<br>For each line, enter the result of dividing the number of trees for the Stage<br>column by the Number of Trees column for the block, and multiplying by<br>100. Round the result to whole numbers; for example, report 65.48% as 65%<br>and 65.84% as 66%.  |  |  |  |  |  |  |
| Stage-Block<br>Number        | Determine if the block containing two or more stages should be reported as a single stage-block or multiple lines for the block based on the different stages. If the Percent of Trees column for the block contains one of the separate stages in the block that is at least 75% of the trees in the block, enter the block as one stage-block on the PAW (PCT) and acreage report. If none of the percentages reported in Percent of Trees column for the block is at least 75%, enter the stage from the Stage and Number of Trees column for the applicable line entry. Denote the stage-block on each line, by the block number and the tree stage.  |  |  |  |  |  |  |

| ELEMENT   | REQUIRED INFORMATION  |
|---|---|
| Stage-Block<br>Number<br>(Continued)  | For example, if the block number is 001 and 87% of the trees in the block are stage III (more than 75 percent), enter the stage-block number as 001-III on the first line for the block; if the block number is 001 and 50% of the trees in the block are stage I and 50% are stage III, enter on separate lines the stage-block numbers as 001-I and 001-III, respectively.<br>Blocks are reported in the same manner on the acreage report.               |
| Date of Last  | Provide the date when the last inspection of the unit was performed, if   |
| Inspection  | applicable.   |
| 1. Has damage<br>occurred to trees<br>from wind<br>(tornado or<br>hurricane),<br>freeze, ice storm,<br>drought, flood,<br>fire, disease, hail,  | If damage has occurred in the crop year prior to the current crop year, the insured must answer "Yes".<br>Enter the block number, type and date of damage for the applicable block(s) in the Remarks section.   |
| and/or failure of<br>the irrigation<br>water supply?<br>2. Have practices or  |   |
| production<br>methods (e.g.<br>removal [ ],<br>transplanting [<br>], resetting [ ],<br>dehorning [ ],<br>grafting [ ],<br>pruning [ ],<br>hedging [ ],<br>transitioning to<br>organic [ ]) been<br>performed? | If trees are transplanted within the most recent two crop years prior to the current crop year, grafted within 12-month period preceding the current crop year, or reset, pruned, dehorned, or hedged, the insured must answer "Yes". Check the applicable practice or method that has been performed. Enter the block number and date the applicable practice(s) or method(s) that has been performed for the applicable block(s) in the Remarks section). |
| 3. Will the<br>insurable acreage<br>of pecans be<br>sequentially<br>thinned for the<br>current crop<br>year?  | If any block will be sequentially thinned during the current crop year, the insured must answer "Yes".<br>Enter the block number for the applicable block(s) in the Remarks section.<br>Only the trees remaining after sequential thinning are insurable. The insured must report on the acreage report, the number of insurable trees. Any trees that will be sequentially thinned will be reported as uninsurable.  |

| ELEMENT   | REQUIRED INFORMATION   |
|---|--|
| 4. Is the current<br>water supply<br>(surface<br>allotment/well)<br>adequate and<br>sufficiently clean<br>(acceptable<br>salt/sodium<br>levels) to<br>maintain the<br>trees being<br>certified above? | For pecan trees for which an irrigated practice is required for insurability:<br>If the insured answers the question "NO", enter the block number for the applicable block(s) in the Remarks section and explain.<br>If the water supply is not adequate (including water quality) on the date insurance attaches, the block will not be insurable.  |
| 5. Is a<br>recommended<br>weed control<br>program being<br>followed?  | If the insured answers the question "NO", enter the block number for the applicable block(s) in the Remarks section and explain.   |
| 6. Is a<br>recommended<br>fertilization<br>program being<br>followed?   | If the insured answers the question "NO", enter the block number for the applicable block(s) in the Remarks section and explain.   |
| 7. Is a<br>recommended<br>disease control<br>program being<br>followed?   | If the insured answers the question "NO", enter the block number for the applicable block(s) in the Remarks section and explain.   |
| 8. Is a<br>recommended<br>insect control<br>program being<br>followed?  | If the insured answers the question "NO", enter the block number for the applicable block(s) in the Remarks section and explain.   |
| 9. Is the pecan<br>production from<br>the insurable<br>acreage sold for<br>human<br>consumption?  | If the insured answers the question "NO", enter the block number for the applicable block(s) in the Remarks section and explain.<br>Any block from which the pecan production is not sold for human consumption is not insurable.  |
| If the answer to question<br>of questions $5 - 8$ are 6<br>commercial pecan acre  | on 2 is "YES", the block may not be insurable. If the answers to one of more "NO", the AIP may determine the orchard or block does not qualify as eage and is not insurable.   |
| Remarks   | Enter notes pertinent to the PAW (PCT) certification, such as the source of information used to complete the worksheet, method of determining tree numbers, and description of the block(s).<br>Once the initial PAW (PCT) and aerial photo(s), maps (e.g. GPS), or Grove Identification Map has been submitted, insureds who continue insurance coverage in subsequent crop years will be allowed to self-certify in the Remarks section of the original PAW (PCT) that no change has occurred.<br>The insured will write "No change for XXXX Crop Year," initial and date. |

| ELEMENT                          | REQUIRED INFORMATION  |
|----------------------------------|---|
| Remarks<br>(Continued)           | If any changes have occurred since the original certification that would alter<br>the stage-block designations (pruning, dehorning, hedging) or the numbers of<br>trees in each stage-block, an amended or revised worksheet, a Grove<br>Identification Map and an aerial photo(s) (e.g. FSA) or satellite imagery (e.g.<br>GPS, Google) should be completed for any blocks of trees affected by the<br>change. The nature and date of the revisions or amendments should be noted<br>in the Remarks section.<br>Identify the applicable block(s) to which any "Yes" or "No" answers to the<br>preceding questions applies and provide an explanation if required. Attach a<br>supplemental fact sheet if more space is needed. |
| Corrected/Revised:<br>Yes □ No □ | If a PAW (PCT) Review is conducted, the loss adjuster/inspector will check<br>the applicable box. If there are no changes to the PAW (PCT), the loss<br>adjuster/inspector will sign and date the original PAW (PCT). If the PAW<br>(PCT) is corrected or revised, the insured and adjuster/inspector will sign and<br>date the corrected/revised PAW (PCT).<br>See paragraph 26D for additional applicant/insured instructions.  |

•

|   | PRODUCER'S PRE-ACCEPTANCE WORKSHEET (PECAN TREE)   |                                    |                                     |   |                                   |  |                                       |              |   |   |  |                 |   |                    |                      |                                    |                     |                       |
|---|--|------------------------------------|-------------------------------------|---|-----------------------------------|--|---------------------------------------|--------------|---|---|--|-----------------|---|--------------------|----------------------|------------------------------------|---------------------|-----------------------|
| Applicant's/Insured's Name  |  | App                                | Applicant's/Insured's Policy Number |   | County                            | County State   |                                       |              | Crop  |   | Crop Year  |                 | Unit Number   |                    |                      |                                    |                     |                       |
|   |  |                                    |                                     |   |                                   |  |                                       |              |   |   |  |                 |   |                    |                      |                                    |                     |                       |
|   |  |                                    | Stag                                | es (trunk diam                                    | eter): Stage                      | $I - \le 6$ inches;  | Stage II – 6                          | .01-10.0 ind | ches; Stage III – 10  | 0.01-15.0 inch                                | es; Stage IV –                                       | 15.01-20.0 i    | inches; Stage V   | √ -> 20.0 inc      | hes                  |                                    | •                   |                       |
| Block<br>Number   | Legal Description<br>Section-Township-<br>Range- Other Land<br>Identifier (e.g. Spanish<br>land grants, metes and<br>bounds, etc.)   | FSA<br>Farm/Tract<br>/Field Number | Acres                               | Insurable or<br>Uninsurable<br>Block<br>(Orchard) | Total Acres<br>Measured by<br>AIP | Variety –<br>Improved,<br>Native,<br>Seedling, or<br>Mixed | Type<br>(Group) -<br>Variety<br>Group | Practice     | Crop Year of Set<br>Out (Improved or<br>Seedling – Stage )<br>only) | Crop Year of<br>Reset (Stage<br>I – III only) | Crop Year of<br>Dehorning,<br>Pruning, or<br>Hedging | Tree<br>Spacing | Planting<br>Pattern <sup>2</sup><br>S, B, Q, H,<br>D, O | Number of<br>Trees | Uninsurable<br>Trees | Stage<br>and<br>Number<br>of Trees | Percent of<br>Trees | Stage Block<br>Number |
|   |  |                                    |                                     |   |                                   |  |                                       |              |   |   |  |                 |   |                    |                      |                                    |                     |                       |
|   |  |                                    |                                     |   |                                   |  |                                       |              |   |   |  |                 |   |                    |                      |                                    |                     |                       |
|   |  |                                    |                                     |   |                                   |  |                                       |              |   |   |  |                 |   |                    |                      |                                    |                     |                       |
|   |  |                                    |                                     |   |                                   |  |                                       |              |   |   |  |                 |   |                    |                      |                                    |                     |                       |
|   |  |                                    |                                     |   |                                   |  |                                       |              |   |   |  |                 |   |                    |                      |                                    |                     |                       |
|   |  |                                    |                                     |   |                                   |  |                                       |              |   |   |  |                 |   |                    |                      |                                    |                     |                       |
|   |  |                                    |                                     |   |                                   |  |                                       |              |   |   |  |                 |   |                    |                      |                                    |                     |                       |
|   |  |                                    |                                     |   |                                   |  |                                       |              |   |   |  |                 |   |                    |                      |                                    |                     |                       |
|   |  |                                    |                                     |   |                                   |  |                                       |              |   |   |  |                 |   |                    |                      |                                    |                     |                       |
|   |  |                                    |                                     |   |                                   |  |                                       |              |   |   |  |                 |   |                    |                      |                                    |                     |                       |
|   |  |                                    |                                     |   |                                   |  |                                       |              |   |   |  |                 |   |                    |                      |                                    |                     |                       |
|   |  |                                    |                                     |   |                                   |  |                                       |              |   |   |  |                 |   |                    |                      |                                    |                     |                       |
|   |  |                                    |                                     |   |                                   |  |                                       |              |   |   |  |                 |   |                    |                      |                                    |                     |                       |
|   |  |                                    |                                     |   |                                   |  |                                       |              |   |   |  |                 |   |                    |                      |                                    |                     |                       |
| Totals:   |  |                                    |                                     |   |                                   |  |                                       |              |   |   |  |                 |   |                    |                      |                                    |                     |                       |
| Provide the date when the last inspection of the unit was performed, if applicable: Date: |  |                                    |                                     |   |                                   |  |                                       |              |   |   |  |                 |   |                    |                      |                                    |                     |                       |
| Please s  | elect either 'Yes' o   | or 'No'                            |                                     |   |                                   |  |                                       |              |   |   |  |                 |   |                    |                      |                                    |                     |                       |
| 1. Has  | . Has damage occurred to trees from wind (tornado or hurricane), freeze, ice storm, drought, flood, fire, disease, hail, and/or failure of the irrigation water supply? [] YES [] NO |                                    |                                     |   |                                   | ] NO   |                                       |              |   |   |  |                 |   |                    |                      |                                    |                     |                       |

\_\_\_\_\_

E

| 2. Have practices or production methods (e.g. removal [], transplanting [], resetting [], dehorning [], grafting [], pruning [], hedging [], transitioning to organic []) been performed? (Check applicable practice or method.) | [ ] YES | [ ] NO |
|--|---------|--------|
| 3. Will the insurable acreage of pecans be sequentially thinned for the current crop year?   | [] YES  | [ ] NO |
| 4. Is the current water supply (surface allotment/well) adequate and sufficiently clean (acceptable salt/sodium levels) to maintain the trees being certified above?   | [] YES  | [ ] NO |
| 5. Is a recommended weed control program being followed?   | [] YES  | [ ] NO |
| 6. Is a recommended fertilization program being followed?  | [] YES  | [ ] NO |
| 7. Is a recommended disease control program being followed?  | [] YES  | [ ] NO |
| 8. Is a recommended insect control program being followed?   | [] YES  | [ ] NO |
| 9. Is the pecan production from the insurable acreage sold for human consumption?  | [] YES  | [ ] NO |
| Remarks:   |         |        |
|  |         |        |
|  |         |        |

|  | (S) Square Planting Pattern             | (H) Hexagonal Planting Pattern |
|--|---|--------------------------------|
|  |   |                                |
| Planting Pattern <sup>2</sup> (see CIH, Exhibit 18, P-U) | (B) Hedgerow or Border Planting Pattern | (D) Double Row Planting        |
|  |   |                                |
|  | (Q) Quincunx                            | (O) Other                      |
|  |   |                                |

#### (See DSSH for applicable statements)

| Insured's Printed Name | Insured's Signature | Date |
|------------------------|---------------------|------|
|                        |                     |      |

| PAW (PCT) Review              |                      |      |  |
|-------------------------------|----------------------|------|--|
| Corrected/Revised: 🗆 Yes No 🗖 |                      |      |  |
| Insured's Printed Name        | Insured's Signature  | Date |  |
|                               | Adjuster's Signature | Date |  |

### **Pre-Acceptance Inspection Report (Pecan Trees)**

The PAIR (PCT) may be prepared on a unit or block basis (where the unit contains more than one block). Generally, a separate PAIR (PCT), by block(s), would be required if information collected indicated an individual block should be rejected for insurance purposes. A PAIR (PCT) can be:

- (1) On a unit basis (if prepared on a unit basis, space is provided to list rejected (uninsurable) blocks as applicable);
- (2) Separately prepared for each rejected block if the key element(s) for rejection are different by block;
- (3) Used to list more than one rejected block if the conditions for rejection within same key element(s) indicate multiple blocks within the unit should be rejected (When multiple blocks within a unit are rejected, rejection of the entire unit should be considered.); or
- (4) As otherwise determined by loss adjuster/inspector.

See the Actions Recommended element.

| ELEMENT  | <b>REQUIRED INFORMATION</b>  |  |  |  |  |  |
|--|--|--|--|--|--|--|
| Applicant's/Insured's<br>Name, Phone<br>Number | Applicant's/Insured's name and phone number.   |  |  |  |  |  |
| Name(s) of Owner                               | Enter the names of other owners with an insurable share in the crop (not SBIs). If none, enter "NONE".   |  |  |  |  |  |
| Name of Operator                               | Enter the name of the operator(s).   |  |  |  |  |  |
| State, County, and<br>Policy Number            | State, county, and policy number to which the crop pertains.   |  |  |  |  |  |
| Crop Year                                      | Enter the appropriate year.  |  |  |  |  |  |
| Сгор   | Enter the crop (commodity) name as listed in the actuarial documents.  |  |  |  |  |  |
| Unit Number                                    | Enter the appropriate unit number. BUs, OUs, and EUs are allowable as defined in the CP.   |  |  |  |  |  |
| Block Number                                   | <ul> <li>Enter the block number (s) for each separate block within the unit as identified on a Grove Identification Map and an aerial photo(s) (e.g. FSA) or satellite imagery (e.g. GPS, Google).</li> <li>Enter the block number to the third decimal place (e.g. 001).</li> <li>A block is a stand of trees of a variety or varieties, native trees or seedling trees on acreage sharing a common boundary with no discernible change in planting pattern (a homogenous planting pattern) except that a block of native pecan trees will be that acreage sharing a common boundary without regard to any planting pattern.</li> <li>If there is a change in planting pattern that distinguishes areas within the block (e.g. a planted stand and a native stand), the insured can list these areas</li> </ul> |  |  |  |  |  |
|  | as separate blocks on the PAIR (PCT).  |  |  |  |  |  |

| ELEMENT   | <b>REQUIRED INFORMATION</b>   |  |  |  |  |
|---|---|--|--|--|--|
| Block Number<br>(Continued)   | If acreage of trees of different varieties, native trees, seedling trees, or stages<br>within the block can be separately plotted, the acreage within the block<br>should be drawn out within the block on the Grove Identification Map and an<br>aerial photo(s) (e.g. FSA) or satellite imagery (e.g. GPS, Google).   |  |  |  |  |
| Legal Description   | Enter the section, township and range, or other descriptions for land if<br>rectangular survey is not applicable. This may include GPS coordinates or<br>other land identification. If additional space is needed, attach a supplemental<br>sheet.  |  |  |  |  |
| FSA<br>Farm/Tract/Field<br>Number   | FSA Farm/Tract/Field number is optional unless units are based on FSA FN, then the FSA FN is required.  |  |  |  |  |
| Location<br>Description   | Enter additional information about the location of the unit.  |  |  |  |  |
| 1. How many years<br>has the insured<br>operated this<br>unit?<br>If less than 3<br>years, include<br>previous owner<br>name and<br>address, if<br>known. | Obtain this information from the insured.<br>This information will assist the loss adjuster/inspector in determining and<br>assessing the orchard practices and management.<br>If less than three years, include previous owner name and address, if known.   |  |  |  |  |
| 2. Has this unit<br>been insured in   | Enter "No" if the unit has not previously been insured by the current insured<br>or another producer.<br>Enter "Yes" if the unit has previously been insured by the current insured or<br>another producer.   |  |  |  |  |
| previous years?<br>If yes, include the<br>years insured<br>and prior policy<br>number(s).   | another producer.<br>If the unit was previously insured and when appropriate, review any previous<br>PAIR (PCT)'s, PAW (PCT)'s and other policy information (e.g. acreage<br>reports) to assist in the PAIR (PCT) completion to understand any<br>insurability concerns, whether changes have occurred in cultural practices or<br>methods, etc. that may impact the insurability of the unit (or individual block<br>if rejection is on a block basis) |  |  |  |  |

| ELEMENT  | <b>REQUIRED INFORMATION</b>  |  |  |  |
|--|--|--|--|--|
| 3. Describe weed<br>control measures<br>used for the unit.   | Review with the insured and explain in detail the cultivation and/or spray program used to control weeds.  |  |  |  |
| Include a<br>description of the<br>orchard floor<br>management:<br>(e.g. tilled, sod,<br>cover crop, etc.)   | Describe the orchard floor management.<br>Describe if this element may increase risk and impact acceptance or rejection<br>of the unit (or individual block if rejection is on a block basis). List any<br>applicable block(s).  |  |  |  |
| 4. Describe the fertilization program used for the unit.<br>Include the insured's method of monitoring soil fertility (i.e. soil analysis, foliar analysis, or both).                                | Describe in detail the fertilization program being used and method of<br>monitoring soil fertility.<br>Describe if this element may increase risk and impact acceptance or rejection<br>of the unit (or individual block if rejection is on a block basis). List any<br>applicable block(s).   |  |  |  |
| 5. Describe in detail<br>disease and<br>insect control<br>measures used<br>(e.g. integrated<br>pest<br>management,<br>calendar spray<br>program,<br>methods used for<br>organic<br>practices, etc.). | Describe in detail the insect and disease control measures used by the insured<br>(e.g. integrated pest management, a calendar spray program, methods used<br>for organic practices, etc.).<br>Describe if this element may increase risk and impact acceptance or rejection<br>of the unit (or individual block if rejection is on a block basis). List any<br>applicable block(s). |  |  |  |
| Evidence of:<br>Disease (check<br>one):<br>Insects (check<br>one):   | Check the applicable box.  |  |  |  |

| ELEMENT   | REQUIRED INFORMATION   |  |  |  |  |  |
|---|--|--|--|--|--|--|
| 6. Evidence of prior<br>damage. If  | When any damage (i.e. drought, freeze, freezing rain, wind, flood, fire, irrigation water supply failure, or salt concentrations) has occurred that may limit insurability or reduce coverage for the insured crop after accounting for acreage/tree reduction relative to when the last PAIR (PCT) was performed or when the last liability reduction was made (e.g. loss determination). Note the unit (or individual block if rejection is on a block basis) where damage has occurred which may affect insurability or coverage for the current crop year. |  |  |  |  |  |
| present, describe<br>type of damage<br>and severity.                      | List any uninsurable blocks if damage applies on a block basis.  |  |  |  |  |  |
|   | If damage is noted, explain in detail, noting the month/year of damage.<br>Identify on a Grove Identification Map and an aerial photo(s) (e.g. FSA) or<br>satellite imagery (e.g. GPS, Google) those blocks and if applicable, the areas<br>of damaged acreage of trees within a block that has been damaged. Verify<br>that the unit, block(s), or areas of damaged trees, applicable stages, insurable<br>and uninsurable determinations have been correctly recorded on the PAW<br>(PCT) and acreage report.  |  |  |  |  |  |
| 7 Evidence of door  | Determine the percentage of any block within the unit where there is<br>evidence of deep planting such as the graft union being below the soil line. If<br>25 percent or more of the trees are deep planted, the block is not insurable<br>(See section $8(c)(1)(i)$ of the CP).   |  |  |  |  |  |
| 7. Evidence of deep<br>planting (e.g.<br>graft union<br>below soil line). | List any uninsurable block in the Acreage/Tree/Inspection Information section of the PAIR (PCT).   |  |  |  |  |  |
|   | Verify that the block(s) have been identified as uninsurable and correctly recorded on the PAW (PCT) and location documents (e.g. Grove Identification Map).   |  |  |  |  |  |
|   | Determine the percentage of any block within the unit that has areas of poor drainage or ponding. If 25 percent or more of the block is subject to either condition, the block is not insurable.   |  |  |  |  |  |
| 8. Evidence of poor<br>drainage or<br>ponding.                            | List any uninsurable block in the Acreage/Tree/Inspection Information section of the PAIR (PCT).   |  |  |  |  |  |
|   | Verify that the block(s) have been identified as uninsurable and correctly recorded on the PAW (PCT) and location documents (e.g. Grove Identification Map).   |  |  |  |  |  |

| EL  | EMENT   | REQUIRED INFORMATION   |  |  |  |  |  |  |
|---|---|--|--|--|--|--|--|--|
| 9. If du<br>insu<br>for 1<br>irrig<br>acre<br>the 1<br>trees<br>max<br>num<br>per 5<br>stag<br>that | rought is an<br>ared cause<br>non-<br>gated (NIrr.)<br>eage, does<br>number of<br>s exceed the<br>cimum<br>aber of trees<br>acre for the<br>e (check all<br>apply)? | Any NIrr. block in which the number of trees/acre for the stage (determined on a weighted basis if more than one stage applies) exceeds the maximum levels contained in the tree/acre table and the SP will not be insurable against drought damage where drought is an insurable cause of loss. Enter applicable block number for any uninsurable block. Verify that applicable block(s) has been correctly recorded on the PAW (PCT) and acreage report. See SP for additional information. Show any weighted stage calculations on a supplemental fact sheet and attach to the PAIR (PCT).  |  |  |  |  |  |  |
| 10. Is a<br>thin<br>othe<br>rem<br>prog<br>carr<br>so, e  | sequential<br>ning or<br>er tree<br>oval<br>gram being<br>ried out? If<br>explain.  | Describe the sequential thinning program or other tree removal that will be<br>implemented for the current crop year and the number of trees to be removed.<br>Verify that any trees which are intended to be sequentially thinned are listed<br>as uninsurable on the PAW (PCT) and the acreage report.   |  |  |  |  |  |  |
| 11. Irriş<br>irrig<br>prac  | gated/Non-<br>gated<br>ctice  | Check the appropriate box (if separate practices are shown on the SP). List the applicable blocks by practice. If the irrigated practice is required for insurability, enter All Blocks.   |  |  |  |  |  |  |
| 12. If th<br>und<br>irrig<br>prac<br>desc<br>deta<br>irrig<br>sour                                  | ne unit is<br>er an<br>gated<br>ctice,<br>cribe in<br>nil the<br>gation water<br>rce(s):  | <ul> <li>If only an irrigated practice is shown on the SP and actuarial documents, describe in detail the irrigation source(s) (if needed, use the Remarks section). Only irrigated trees are insurable.</li> <li>Obtain from the insured information about water source(s) and irrigation district(s) from which water is allocated, allocation percentage, and irrigati well information.</li> <li>Include any information regarding water obtained through water transfers a any potential curtailment of current and future water supplies.</li> <li>If an adequate irrigation water supply is not available or not available for individual blocks, identify the block(s) in the Additional Explanation section for this element as uninsurable. Verify that the applicable block(s) have be correctly recorded on the PAW (PCT) and acreage report.</li> </ul> |  |  |  |  |  |  |

| ELEMENT  | REQUIRED INFORMATION  |  |  |  |  |  |
|--|---|--|--|--|--|--|
| 13. Describe in detail   | Estimate the topsoil depth (based on general knowledge or local soil surveys for the area if available).  |  |  |  |  |  |
| the topsoil depth<br>of the unit.  | Describe if this element may increase risk and impact acceptance or rejection of the unit (or individual block if rejection is on a block basis). List any applicable block(s).       |  |  |  |  |  |
| 14. Describe in detail   | Describe the soil texture characteristics (fine (clay), medium, or coarse (sandy) texture).   |  |  |  |  |  |
| the topsoil texture of the unit.   | Describe if this element may increase risk and impact acceptance or rejection<br>of the unit (or individual block if rejection is on a block basis). List any<br>applicable block(s). |  |  |  |  |  |
|  | Discuss with the insured (and perform an assessment) to determine any potential soil limitations (e.g. slope, depth, drainage, pH, saline/sodic, or toxicity, etc.).                  |  |  |  |  |  |
| 15. Are there soil<br>limitations (e.g.<br>slope, depth,   | Other resources should also be considered when appropriate, such as soil maps.  |  |  |  |  |  |
| pH, saline/sodic,<br>toxicity, etc.)? If<br>so, explain.   | Areas of stunted growth, thin foliage, dead limbs, or light green or discolored foliage may indicate that soil limitations exist.   |  |  |  |  |  |
|  | Describe if this element may increase risk and impact acceptance or rejection<br>of the unit (or individual block if rejection is on a block basis). List any<br>applicable block(s). |  |  |  |  |  |
| 16. Is the unit subject  | Determine whether any abnormal flood hazards exist.   |  |  |  |  |  |
| to above normal<br>flood hazards? If<br>so, explain.   | Describe if this element may increase risk and impact acceptance or rejection<br>of the unit (or individual block if rejection is on a block basis). List any<br>applicable block(s). |  |  |  |  |  |
| 17. Describe in detail<br>any pruning or<br>hedging practices<br>used. How often<br>is pruning or<br>hedging<br>performed? | Describe in detail the pruning/hedging practices used, date normally completed, and whether pruning/hedging is annual, biennial, etc.   |  |  |  |  |  |
| 18. Are native trees,<br>seedling trees,<br>improved trees, or<br>a combination<br>being used in this<br>unit?             | List acreage and number of trees for each tree type. Identify the acreage on a Grove Identification Map and an aerial photo(s) (e.g. FSA) or satellite imagery (e.g. GPS, Google).    |  |  |  |  |  |

| ELEMENT  | REQUIRED INFORMATION   |  |  |  |  |  |
|--|--|--|--|--|--|--|
| 19. If improved trees are used:  | List the varieties. Include variety(ies)/location (see map/photo instruction,<br>Element 18), number of trees, density(trees/acre), configuration, and if<br>adapted to the area.  |  |  |  |  |  |
| 20. If native or seedling trees are used:  | List the location (see map/photo instruction, Element 18), number of trees, density (trees/acre), and configuration (if the trees are in a distinguishable pattern).   |  |  |  |  |  |
| 21. For Stage I<br>trees, what is<br>the date of set   | For Stage I trees, enter the date and calendar year of set out. (Date of set out applicable for purposes of establishing insurability.)  |  |  |  |  |  |
| out (for<br>improved<br>varieties and  | Native trees must have a trunk diameter of at least three inches to be insurable.  |  |  |  |  |  |
| seedling trees)<br>and diameter<br>size for native<br>trees?   | List any uninsurable block(s). Verify that any Stage I blocks (improved, seedling, and native) not meeting insurability requirements have been correctly recorded on the PAW (PCT) and acreage report.   |  |  |  |  |  |
| 22. What is the date<br>of grafting (for<br>improved   | For trees grafted after set out, enter the date and calendar year of grafting (used to determine insurability; see section 8(b)(1)(iii) of the CP).  |  |  |  |  |  |
| varieties if<br>performed after<br>set out)?   | List any uninsurable block(s) if applicable. Verify that any uninsurable block(s) have been correctly recorded on the PAW (PCT) and acreage report.  |  |  |  |  |  |
| 23. Are trees<br>leaning or<br>toppled?  | Describe the number of trees toppled or leaning, the severity of the lean, and<br>the condition of the trees, i.e. the trees are in decline or are in a similar<br>condition to surrounding trees that are not leaning or were not toppled.  |  |  |  |  |  |
| If so, describe<br>the number of<br>trees toppled or<br>leaning and the<br>severity of the<br>lean (degrees<br>from vertical). | Trees are uninsurable if leaning or toppled to the extent reset (see reset definition) is required, if practical, (See the LASH, paragraph 33 for guidance) and such trees are not reset. (Reset does not apply to stage IV and V trees; stage IV and V trees that are leaning are not insurable.) Verify that the trees have been identified as uninsurable and correctly recorded on the PAW (PCT) and location documents (e.g. Grove Identification Map). |  |  |  |  |  |
|  | If trees are leaning or toppled (stage $I - III$ ) and showing signs of tree decline (e.g. dead limbs in the top portion of the tree or throughout, thinning leaves, etc., resulting from various causes, e.g. a damaged root system and related factors, disease, etc.), they will be considered uninsurable.   |  |  |  |  |  |

| ELEMENT  | REQUIRED INFORMATION   |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|
| 24.Have previously<br>leaning or<br>toppled trees<br>been reset?   | Leaning or toppled trees (stage I – III trees) requiring reset are insurable if<br>reset.<br>For insured trees insurably damaged the prior (or current) crop year and reset:<br>Areas within the unit or block which have been reset should be identified.<br>(Any indemnity payable for damage for such trees will be based on RM4 loss<br>determinations. If during the 15-month damage discovery period following<br>the crop year in which the insured damage event occurred, reset trees die, any<br>additional loss determination (RM1 or RM2, as applicable) will be based on<br>the original date and crop year of damage. The total indemnity will not<br>exceed the liability limits contained in the section 13(a)(3) of the CP.) |  |  |  |  |  |  |  |  |
| If so, describe<br>the number of<br>trees that have<br>been reset and<br>when reset<br>occurred.                           |  |  |  |  |  |  |  |  |  |
| 25.Space occupied<br>by the canopies<br>of live trees<br>(percent of the<br>orchard floor<br>covered by<br>shade at noon): | The degree of shading in an orchard is an indication of over-crowding.<br>Acreage exceeding the maximum levels, by stage, would not be insurable for<br>drought. Review the maximum trees/acre table and insurability instructions<br>in Element 9.  |  |  |  |  |  |  |  |  |
| 26.Minimum<br>Number of<br>Trees/Acre  | Check the applicable entry for the block. If the PAIR (PCT) applies to a block containing different stages, the minimum number of trees/acre will be a weighted average for the block, based on the applicable stage minimums shown on the adjacent table. Minimum trees per acre must equal or exceed the recommended minimum number of trees per acre shown in tree/acre table for insurability. Enter applicable block number for any uninsurable block. Verify that applicable block(s) has been correctly recorded on the PAW (PCT) and acreage report. Stage the SP for additional information. Show any weighted stage calculations   |  |  |  |  |  |  |  |  |

| ELEMENT   | REQUIRED INFORMATION   |
|---|--|
| 27. Determine the<br>current unit<br>potential:   | Check the applicable entry for the unit. If the PAIR (PCT) applies to more than one block and the potential varies by block, list the block(s) within the unit for each applicable potential.  |
| 28. Do trees in this<br>unit have<br>sufficient vigor<br>to produce a<br>reasonable<br>yield? | Check Yes or No for the unit. If Yes is checked, then check either the Good<br>or Average entry. If No is checked, then check the Poor entry. If the PAIR<br>(PCT) applies to more than one block within a unit and the vigor varies by<br>block, check the applicable vigor level and list the block(s) for each<br>applicable level. |
| 29. Crops<br>commercially<br>grown primarily<br>for:  | Check all that apply (For insurability, the orchard must be a commercial orchard. See Definitions.).   |

| ELEMENT  | REQUIRED INFORMATION  |  |  |  |  |
|--|---|--|--|--|--|
| Measured or<br>Determined Acres<br>of Unit/Block(s):       | Enter the total unit acreage. If a PAIR (PCT) applies on a block basis (for each block separately or multiple blocks, within the unit), identify each block and enter the acreage by block.   |  |  |  |  |
| Total Unit Acreage<br>Insurable:                           | N/A   |  |  |  |  |
| Total Unit Acreage<br>Uninsurable:                         | N/A   |  |  |  |  |
| Method of<br>Measurement:                                  | Enter the method(s) of measurement.   |  |  |  |  |
| Determined<br>Number of<br>Trees/Acre in<br>Unit/Block(s): | Enter the total number of trees in the unit. If a PAIR (PCT) applies on a<br>block basis (for each block separately or multiple blocks within the unit),<br>identify each block and enter the number of trees/acre by block. (Units or<br>blocks that do not contain the minimum number trees per acre are<br>uninsurable.)<br>If the producer estimates the tree number on the PAW (PCT), the loss<br>adjuster/inspector must verify the accuracy of the estimate (see paragraph |  |  |  |  |
|  | 26D for additional instructions).   |  |  |  |  |
| Total Unit/Block<br>Number of Trees<br>Insurable:          | Enter the total number of insurable and uninsurable trees in the unit. If a PAIR (PCT) applies on a block basis (for each block separately or multiple blocks, within the unit), identify each block (rejected and accepted) and enter the number of insurable and uninsurable trees by block.  |  |  |  |  |
| Total Unit/Block<br>Number of Trees<br>Uninsurable:        | If the producer estimates the tree number on the PAW (PCT), the loss adjuster/inspector must verify the accuracy of the estimate (see paragraph 26D for additional instructions).   |  |  |  |  |

# Acreage/Tree/Inspection Information

| ELEMENT   | REQUIRED INFORMATION  |  |  |  |  |
|---|---|--|--|--|--|
| Method of<br>Measurement:   | Enter the method(s) of measurement.   |  |  |  |  |
| Determined<br>Number of Trees<br>by Stage   | Enter the number of insurable trees by stage.   |  |  |  |  |
| Insurable tree<br>information:  |   |  |  |  |  |
| Complete and<br>attach appropriate<br>crop addendum<br>worksheet(s)   | Crop Addendum Worksheets are not applicable.  |  |  |  |  |
| Verify and/or<br>correct Producer's<br>Pre-Acceptance<br>Worksheet(s)   | Verify entries on PAW (PCT)(s), making any corrections needed, and initial/sign.  |  |  |  |  |
| Uninsurable tree information:   |   |  |  |  |  |
| Complete and<br>attach appropriate<br>crop addendum<br>worksheet(s)   | Crop Addendum Worksheets are not applicable.  |  |  |  |  |
| Verify and/or<br>correct Producer's<br>Pre-Acceptance<br>Worksheet(s)   | Verify entries on PAW (PCT(s), making any corrections needed, and initial/sign.   |  |  |  |  |
| Obtain and attach   | Obtain aerial photo(s) or maps (e.g. GPS) with blocks, units, and legal description, must be clearly identified and consistent with the same information contained on a Grove Identification Map.   |  |  |  |  |
| Grove<br>Identification Map<br>and an aerial<br>photo(s) (e.g. FSA)<br>or satellite imagery<br>(e.g. GPS, Google) | When the Grove Identification Map and an aerial photo(s) (e.g. FSA) or satellite imagery (e.g. GPS, Google) are not available, include hand sketch map(s) with the following information:   |  |  |  |  |
|   | (a) Identify the location of separate units for the same insured. The unit<br>location must identify roads, the nearest intersection, landmarks along with<br>cardinal directions (e.g. a north arrow) or township/range/section<br>designations; |  |  |  |  |

| ELEMENT   | REQUIRED INFORMATION   |
|---|--|
| Obtain and attach<br>Grove<br>Identification Map<br>and an aerial<br>photo(s) (e.g. FSA)<br>or satellite imagery<br>(e.g. GPS, Google)<br>(Continued) | <ul><li>(b) Identify the location of blocks within one unit. Sketch out the blocks, showing the exact location of each block in relation to other blocks in the unit. Label each block with a Block Number and any other applicable identification (e.g. home farm); (if available, show identifiable varieties, native trees, seedling trees, or stages); and</li><li>(c) Include an overall sketch map of all units.</li></ul> |
| Additional  | Additional notes and observations.   |
| information and comments  | Include supplemental fact sheets, as necessary, referencing appropriate items.   |
| Loss<br>adjuster/inspector's<br>evaluation of the<br>management of the<br>operation (check<br>one):   | These are subjective questions requiring consideration for overall evaluation of management and conditions of the unit.<br>Evaluate the unit or block(s).  |
| Loss<br>adjuster/inspector's  | Rate as above average, average, or below average based on the Loss adjuster/inspector's review.  |
| evaluation of the<br>unit or block<br>conditions:   | Check the applicable entry for the unit; check all entries that apply if multiple blocks are being evaluated. List each block.   |
| Actions<br>Recommended:   | Check the applicable entry for the unit; check the applicable entry if different recommendations are being made by block. List each block.   |
| Sign and Date   | The loss adjuster/inspector (and Supervisor) must sign and date the PAIR (PCT) form.   |

| A separate   | PRE-ACCEPTANC                     | E INSPECTIO  | <b>ON REPORT</b><br>) needs to be c | (PECAN TR        | EE)<br>each block | within the u                    | nit.       |                      |
|--|-----------------------------------|--|-------------------------------------|------------------|-------------------|---------------------------------|------------|----------------------|
| Applicant's/Insured's Name   | er State County Policy No. Crop ! |  | Crop Year                           | rop Year Crop Un |                   | Block Number                    |            |                      |
|  |                                   |  |                                     |                  |                   |                                 |            |                      |
| Name of Owner Name of Operator   |                                   | Legal Description: Section-Township-Range- Other Land<br>Identifier (e.g. Spanish land grants, metes and bounds, etc.) |                                     |                  |                   | FSA Farm/Tract/Field<br>Number  |            | Location Description |
|  |                                   |  |                                     |                  |                   |                                 |            |                      |
| Questions:   |                                   | Provide Answe  | ers in This Section                 | n:               |                   |                                 |            |                      |
| 1. How many years has the applicant/insured oper   | rated this unit?                  |  |                                     |                  |                   |                                 |            |                      |
| If less than 3 years, include previous owner nam   | ne and address, if known.         |  |                                     |                  |                   |                                 |            |                      |
| 2. Has this unit been insured in previous years?   |                                   |  |                                     |                  |                   |                                 |            |                      |
| If yes, include the years insured and prior policy number(s).  |                                   |  |                                     |                  |                   |                                 |            |                      |
| 3. Describe weed control measures used for the unit. Include a description of the orchard floor management: (e.g. tilled, sod, cover crop, etc.)   |                                   |  |                                     |                  |                   |                                 |            |                      |
| <ol> <li>Describe the fertilization program used for the unit. Include the insured's method of<br/>monitoring soil fertility (i.e. soil analysis, foliar analysis, or both).</li> </ol>  |                                   |  |                                     |                  |                   |                                 |            |                      |
| <ol> <li>Describe in detail disease and insect control measures used (e.g. integrated pest<br/>management, calendar spray program, methods used for organic practices, etc.).</li> </ol> |                                   |  |                                     |                  |                   |                                 |            |                      |
| Evidence of disease (check one):   |                                   | []RARE   |                                     | []SEVERE [       |                   |                                 | ] MODERATE |                      |
| Evidence of insects (check one):   |                                   |  | [] RARE                             |                  | []SEVERE [        |                                 |            | ] MODERATE           |
| 6. Evidence of prior damage. If present, describe type of damage and severity.   |                                   |  |                                     |                  |                   |                                 |            |                      |
| 7. Evidence of deep planting (e.g. graft union below soil line).   |                                   | ]  | [ ] Less than 25 percent of trees   |                  |                   | [ ] 25 percent or more of trees |            |                      |
| 8. Evidence of poor drainage or ponding.   |                                   | [ ] Less than 25 percent [ ] 25 percent or me  |                                     |                  | t or more         |                                 |            |                      |

|     |  | Stage I                                     | Sta              | ge II      | Stag                          | ge II                    | 5                       | Stage I        | V                           | Stage                   | e V             |
|-----|--|---|------------------|------------|-------------------------------|--------------------------|-------------------------|----------------|-----------------------------|-------------------------|-----------------|
| 9.  | If drought is an insured cause for non-irrigated acreage, does the number of trees   | [ ] Yes [ ] No                              | [ ] Yes          | 5 [ ] No   | [ ] Yes                       | [ ] No                   | []                      | Yes [ ]        | No                          | [ ] Yes [               | ] No            |
|     | exceed the maximum number of trees per acre for the stage (check an that apply):   |   | ·                |            |                               | -                        |                         |                |                             |                         |                 |
| 10. | Is sequential thinning or other tree removal program being carried out? If so, explain.  |   |                  |            |                               |                          |                         |                |                             |                         |                 |
| 11. | Irrigated/Non-irrigated practice:  |   | [] IRRIG         | ATED       |                               |                          | [                       | ] NON          | -IRRIGATI                   | ED                      |                 |
| 12. | If the unit is under an irrigated practice, describe in detail the irrigation water source   | Surface:<br>(percentage of total            | supply)          | Irrigation | n district name               | Last year'<br>(percentag | 's allocat<br>ge of nor | tion:<br>rmal) | Expected a<br>(percentage   | llocation the of normal | nis year:<br>l) |
|     | (s):   |   | %                |            |                               |                          |                         | %              |                             |                         | %               |
|     |  | Salinity (dS m <sup>-1</sup> ):             |                  | Soc        | lium (SAR):                   |                          |                         | Boro           | n (ppm):                    |                         |                 |
|     | Additional explanation for Element 12 entries, if applicable:  | Irrigation Well(s):<br>(percentage of total | supply)          |            | How many wel                  | ls?                      |                         | Total          | gallons per                 | minute? G               | <b>PM</b>       |
|     |  |   |                  | %          | ,                             |                          |                         |                |                             |                         |                 |
|     |  | Water obtained thre                         | ough water trans | sfer:      | a                             | cre feet per a           | acre                    |                |                             |                         |                 |
|     |  | Salinity (dS m <sup>-1</sup> ):             |                  | Soc        | lium (SAR):                   |                          |                         | Boro           | n (ppm):                    |                         |                 |
| 13. | Describe in detail the topsoil depth of the unit.  |   |                  |            |                               |                          |                         |                |                             |                         |                 |
| 14. | Describe in detail the topsoil texture of the unit.  |   |                  |            |                               |                          |                         |                |                             |                         |                 |
| 15. | Are there soil limitations (e.g. slope, depth, texture, drainage, pH, saline/sodic, toxicity, etc.)? If so, explain.                                       |   |                  |            |                               |                          |                         |                |                             |                         |                 |
| 16. | Is the unit subject to above normal flood hazards? If so, explain.   |   |                  |            |                               |                          |                         |                |                             |                         |                 |
| 17. | Describe in detail any pruning or hedging practices used. How often is pruning or hedging is performed?  |   |                  |            |                               |                          |                         |                |                             |                         |                 |
| 18. | Are native trees, seedling trees, improved trees, or a combination being used in this unit? List acreage and number of trees for each tree type:           | Improved Tre<br>Acreage/Tree Num            | e<br>nber:       | Ac         | Native Tree<br>reage/Tree Nur | nber:                    |                         | Acre           | Seedling Tre<br>age/Tree Nu | æ<br>mber:              |                 |
| 19. | If improved are used, list the varieties. Include variety(ies)/location, number of trees, density (trees/acre), configuration, and if adapted to the area. |   |                  |            |                               |                          |                         |                |                             |                         |                 |

| 20. | If native trees or seedling trees are used, list the locat<br>(trees/acre), and configuration (if the trees are in a di                        | ion, numbe<br>stinguishab | r of trees, d<br>le pattern). | lensity     |                  |                                   |           |              |        |          |                       |                   |               |           |                               |                     |  |
|-----|--|---------------------------|-------------------------------|-------------|------------------|-----------------------------------|-----------|--------------|--------|----------|-----------------------|-------------------|---------------|-----------|-------------------------------|---------------------|--|
| 21. | For Stage I trees, what is the date of set out (for impr<br>and diameter size for native trees)?   | oved variet               | ies and see                   | dling trees | 5                |                                   |           |              |        |          |                       |                   |               |           |                               |                     |  |
| 22. | 2. What is the date of grafting (for improved varieties if performed after set out)?   |                           |                               |             |                  |                                   |           |              |        |          |                       |                   |               |           |                               |                     |  |
| 23. | 23. Are trees leaning or toppled? If so, describe the number of trees toppled or leaning and the severity of the lean (degrees from vertical). |                           |                               |             |                  |                                   |           |              |        |          |                       |                   |               |           |                               |                     |  |
| 24. | Have previously leaning or toppled trees been reset?<br>trees that have been reset and when reset occurred.                                    | nber of                   |                               |             |                  |                                   |           |              |        |          |                       |                   |               |           |                               |                     |  |
| 25. | 25. Space occupied by the canopies of live trees (percent of the orchard floor covered by shade at noon):                                      |                           |                               |             |                  |                                   | [ ] 50-60 | %            | ]      | ] 61-70% | 6                     | [ ]71             | -80%          | []81      | -90%                          | [ ]91-100%          |  |
|     |  |                           |                               |             | Ν                | lative                            | •         |              |        |          |                       |                   | Impro         | ved/Se    | edling                        | •                   |  |
| 26. | Minimum Number of Trees/Acre.  |                           | [ ] Less than m               |             |                  | n minimum [ ] Equals or exceeds m |           |              | ds mi  | nimum    | [ ] Less than minimum |                   |               | [         | [ ] Equals or exceeds minimum |                     |  |
|     |  |                           | Applicabl                     | e Block #s  | Applicable Block |                                   |           | ock #s       | Applic |          |                       | plicable Block #s |               |           | Applicable Block #s           |                     |  |
|     |  |                           |                               | Appli       | cable Block #s   |                                   |           |              |        | Appli    | cable Bl              | ock #s            |               |           |                               | Applicable Block #s |  |
| 27. | Determine the current unit potential: (check one)  | STABL                     | Æ[]                           |             |                  |                                   | DECLI     | NING         | []     |          |                       | INCREAS           |               | ASING [ ] |                               |                     |  |
| 28. | Do trees in this unit have sufficient vigor to produce   |                           |                               | _           |                  |                                   | Applicab  | le Block     | ĸ#s    |          |                       | Applic            | able Block #s |           |                               | Applicable Block #s |  |
|     | a reasonable yield?  | YES [ ]                   | NO [ ]                        | Tree vigo   | or: GOOD [       | []                                |           |              |        | AVERAGE  |                       | ]                 |               | POOR [ ]  |                               |                     |  |
| 29. | Crops commercially grown primarily for (check all that apply):   | ]                         | ] RETAII                      |             | [ ] SHELLER      |                                   | ER        | R []EXPORTER |        | R        | [ ] PROCESSOR         |                   |               | []OTHER   |                               |                     |  |

| Acreage/Tree/Inspection Information            |  |             |  |                    |                  |                      |                      |         |
|--|--|-------------|--|--------------------|------------------|----------------------|----------------------|---------|
| Measured or Determined Acres of Unit/Block(s): | Total Unit Acreage Insurable:  |             | Total Unit Acreage Uninsurable: Method o |                    |                  |                      | Method of Measur     | ement:  |
|  |  |             |  |                    |                  |                      |                      |         |
| Determined Number of Trees in Unit/Block(s)    | Number of Trees in Unit/Block(s) Total Unit/Block(s) Number of Trees Insurable |             |  | Block(s) Number of | Method of Measur | ement:               |                      |         |
|  |  |             |  |                    |                  |                      |                      |         |
| Determined Number of Trees by Stage            | Stage I  | Stage II    | Stage III                                |                    |                  | Stage IV             |                      | Stage V |
|  |  |             |  |                    |                  |                      |                      |         |
| Insurable tree information:                    | Complete and attach appro  | um workshee | t(s) [ ]                                 | Verify and/o       | r correct Pro    | oducer's Pre-Accepta | nce Worksheet(s) [ ] |         |
|  |  |             |  |                    |                  |                      |                      |         |

| Uninsurable tree information:                    | Comple                         | te and attach       | appropriate crop adde   | ndum workshe | et(s) [ | J           | Verify and/or correct Produce | er's Pre-Ac       | ceptance Worksheet(s) [ ] |  |
|--|--------------------------------|---------------------|---|--------------|---------|-------------|-------------------------------|-------------------|---------------------------|--|
|  |                                |                     |   |              |         |             |                               |                   |                           |  |
|  |                                |                     |   |              |         |             |                               |                   |                           |  |
|  |                                |                     |   |              |         |             |                               |                   |                           |  |
| Obtain and attach aerial photo(s)/map(s) [       | ]                              |                     | Additional information and comments (attach additional sheets if necessary) [ _ ] |              |         |             |                               |                   | ary) [ ]                  |  |
|  |                                |                     |   |              |         |             |                               |                   |                           |  |
|  |                                |                     |   |              |         |             |                               |                   |                           |  |
|  |                                |                     |   |              |         |             |                               |                   |                           |  |
| Loss adjuster/inspector's evaluation of the n    |                                | Above Average [ ]   |   |              | Δ.      | erage [ ]   |                               | Below Average [ ] |                           |  |
| (check one):                                     |                                |                     |   |              |         |             |                               |                   |                           |  |
| Loss adjuster/inspector's evaluation of the u    | nit or block conditions (check | k Above Average [ ] |   |              |         | Av          | erage [ ]                     |                   | Below Average [ ]         |  |
| one for the unit; check all that apply if multip | ple blocks):                   | Unit [ ]            | Block #s [  ]   |              | Unit [  | ] Block #   | ts [ ]                        | Unit [ ]          | Block #s [ ]              |  |
|  |                                | Accen               | tance   |              |         | Pointion    |                               |                   |                           |  |
|  |                                | Ассер               | tance   |              |         |             | ĸ                             | ejection          |                           |  |
| Actions Recommended (check the                   | Entire Unit [ ]                |                     | Block #s [ ]  |              |         | Entire Unit | []                            | Block #           | ts [ ]                    |  |
| applicable entry for the unit or block if        |                                |                     |   |              |         |             |                               |                   |                           |  |
| multiple blocks).                                |                                |                     |   |              |         |             |                               |                   |                           |  |
|  |                                |                     |   |              |         |             |                               |                   |                           |  |
|  |                                |                     |   |              |         |             |                               |                   |                           |  |
|  |                                |                     |   |              |         | 1           |                               |                   |                           |  |

#### (See DSSH for applicable statements)

| Adjuster's Printed Name                     | Adjuster's Signature   | Date |  |  |  |  |  |  |
|---|------------------------|------|--|--|--|--|--|--|
|   |                        |      |  |  |  |  |  |  |
| Adjuster Telephone Number and Contact Point |                        |      |  |  |  |  |  |  |
| Supervisor's Printed Name                   | Supervisor's Signature | Date |  |  |  |  |  |  |
|   |                        |      |  |  |  |  |  |  |
| Supervisor's Telephone Number               |                        |      |  |  |  |  |  |  |

### Item:

- (1) Enter the name of the insured or applicant.
- (2) Enter the county where insurance attaches.
- (3) Enter the policy number.
- (4) Enter the crop and type, if applicable.
- (5) Enter the unit number.
- (6) Enter the section, township, and range (or applicable legal description in place of section, township, and range) in which the insured crop is located.
- (7) Maps: Identify the acreage to be mapped using a unit designation. Use as many maps as necessary.
  - (a) Identify highways and other significant landmarks that can be used to help identify orchard locations.
  - (b) Outline block locations. Draw blocks in actual shapes and as close to scale as possible. Indicate the varieties, native trees, seedling trees, stages, damaged/reset areas of planted trees, etc. (sub-blocks), if identifiable. Indicate any trees that have been excluded from coverage by labeling as "excluded."
  - (c) Outline land ownership boundaries in red for each section involved. Indicate land ownership across section lines with tie bars.

## **GROVE IDENTIFICATION MAP (FOR ILLUSTRATION ONLY)**

|       |       |          |                       |         |          |          |   |        |       |    |                       |                 | Page _1  | of  | 1_ |
|-------|-------|----------|-----------------------|---------|----------|----------|---|--------|-------|----|-----------------------|-----------------|----------|-----|----|
|       |       | Joe Fa   | rmer                  |         |          |          |   | Doug   | herty |    |                       |                 | XXXX     | XXX |    |
|       | (Nan  | ne of In | sured o               | r Appli | cant)    |          |   | (Cot   | inty) |    |                       | (Policy Number) |          |     | )  |
| Crop: | Pecan | Trees    |                       | Type:   | Group    | I        | - | Unit N | o.:   |    | 00010                 | 000BU           |          |     |    |
|       | Legal | Descri   | ption:                |         | Tov      | vnship:  |   |        |       |    | Range:                |                 |          |     |    |
|       |       | s        | ection <sup>.</sup> F | FSA FN  | 6        |          |   |        |       | s  | ection <sup>.</sup> I | FSA FN          | 7        |     |    |
| -     |       |          |                       |         |          |          | 1 |        |       | 5  | <u>eeuon. </u>        |                 | <u>,</u> |     |    |
|       |       | <u> </u> | Stag                  | e III   | <u> </u> | <u> </u> |   |        |       |    |                       | Sta             | ge I     |     |    |
|       |       |          |                       |         |          |          |   |        |       |    |                       |                 |          |     |    |
|       |       |          |                       |         |          |          |   |        |       |    |                       |                 |          |     |    |
|       | Stag  | ge II    |                       |         |          |          |   |        |       |    |                       |                 |          |     |    |
|       |       |          |                       |         |          |          |   |        |       |    | Stag                  | e IV            |          |     |    |
|       |       |          |                       |         |          |          |   |        |       |    |                       |                 |          |     |    |
|       |       |          |                       |         |          |          |   |        |       |    |                       |                 |          |     |    |
|       |       | Se       | ection: _             |         |          |          | - | _      |       | Se | ection: _             |                 |          |     |    |
|       |       |          |                       |         |          |          |   |        |       |    |                       |                 |          |     |    |
|       |       |          |                       |         |          |          |   |        |       |    |                       |                 |          |     |    |
|       |       |          |                       |         |          |          |   |        |       |    |                       |                 |          |     |    |
|       |       |          |                       |         |          |          |   |        |       |    |                       |                 |          |     |    |
|       |       |          |                       |         |          |          |   |        |       |    |                       |                 |          |     |    |

Comments:

## **GROVE IDENTIFICATION MAP – Continuation Sheet (for illustration only)**



| Table A – Setting Distances and Approximate Number of Trees Fer Acre |                    |     |    |    |    |    |    |    |    |    |     |
|--|--------------------|-----|----|----|----|----|----|----|----|----|-----|
|  | Row Spacing (Feet) |     |    |    |    |    |    |    |    |    |     |
|  |                    | 20  | 30 | 35 | 40 | 45 | 50 | 60 | 70 | 80 | 100 |
|  | 20                 | 109 | 73 | 62 | 54 | 48 | 44 | 36 | 31 | 27 | 22  |
| t)   | 30                 | 73  | 48 | 41 | 36 | 32 | 29 | 24 | 21 | 18 | 15  |
| Fee  | 35                 | 62  | 41 | 36 | 31 | 28 | 25 | 21 | 18 | 16 | 12  |
| ng (   | 40                 | 54  | 36 | 31 | 27 | 24 | 22 | 18 | 16 | 14 | 11  |
| acir   | 45                 | 48  | 32 | 28 | 24 | 22 | 19 | 16 | 14 | 12 | 10  |
| Sp:  | 50                 | 44  | 29 | 25 | 22 | 19 | 17 | 15 | 12 | 11 | 9   |
| ree  | 60                 | 36  | 24 | 21 | 18 | 16 | 15 | 12 | 10 | 9  | 7   |
| T  | 70                 | 31  | 21 | 18 | 16 | 14 | 12 | 10 | 9  | 8  | 6   |
|  | 80                 | 27  | 18 | 16 | 14 | 12 | 11 | 9  | 8  | 7  | 5   |
|  | 100                | 22  | 15 | 12 | 11 | 10 | 9  | 7  | 6  | 5  | 4   |

| Table A – | Setting | Distances | and Ar | oproximate | Number | of Trees | Per | Acre |
|-----------|---------|-----------|--------|------------|--------|----------|-----|------|
| I abic 11 | beimg   | Distances | and m  | pi Uninate | Tumber | of fices |     | LUIU |

The above figures are for square/rectangular and hedgerow plantings. Use the formula below for tree and/or row spacings not shown in the chart: Multiply the distance between tree rows by the spacing between trees within the row and divide into 43,560. Refer to the LAM for additional information on how to calculate the number of trees per acre.

**Formula:** 43,560 sq. ft. per acre  $\div$  tree spacing (L x W) = Number of trees per acre

**Example**: Tree row spacing 25.0 feet and tree spacing within rows 25.0 feet.

 $\frac{43,560 \text{ sq. ft.}}{25.0 \text{ ft. x } 25.0 \text{ ft.}} = \frac{43,560 \text{ sq. ft.}}{625 \text{ sq. ft.}} = 69.7 = 70 \text{ trees per acre.}$ 

| Block Siz   | ze (acres) |           | Distance Be | etween Plots | Distance Be | tween Lines |
|-------------|------------|-----------|-------------|--------------|-------------|-------------|
| Lower       | Upper      | No. Plots | Chains      | Feet         | Chains      | Feet        |
| 5           | 10         | 3         | 4           | 264          | 4           | 264         |
| 10.1        | 15         | 4         | 5           | 330          | 5           | 330         |
| 15.1        | 20         | 6         | 5           | 330          | 5           | 330         |
| 20.1        | 30         | 7         | 5           | 330          | 5           | 330         |
| 30.1        | 40         | 10        | 5           | 330          | 6           | 396         |
| 40.1        | 50         | 12        | 5           | 330          | 6           | 396         |
| 50.1        | 75         | 13        | 6           | 396          | 6           | 396         |
| 75.1        | 100        | 18        | 6           | 396          | 7           | 462         |
| 100.1       | 150        | 21        | 6           | 396          | 8           | 528         |
| 150.1       | 200        | 27        | 7           | 462          | 8           | 528         |
| 200.1       | 250        | 30        | 8           | 528          | 8           | 528         |
| 250.1       | 300        | 31        | 9           | 594          | 9           | 594         |
| 300.1       | 400        | 31        | 9           | 594          | 10          | 660         |
| 400.1       | 500        | 34        | 10          | 660          | 11          | 726         |
| 500.1       | 600        | 34        | 12          | 792          | 12          | 792         |
| 600.1       | 700        | 35        | 13          | 858          | 13          | 858         |
| 700.1       | 800        | 35        | 14          | 924          | 14          | 924         |
| 800.1       | 900        | 36        | 14          | 924          | 15          | 990         |
| 900.1       | 1000       | 37        | 15          | 990          | 16          | 1056        |
| 1000.1 5000 |            | 41        | 15          | 990          | 16          | 1056        |

 Table B – Minimum Sample Requirements for Native Blocks

Sources (formulas): Henning and Mercker (2009); Strimbu and Holley

in

### **Plot Sampling – Native Orchards – No Distinguishable Planting Pattern**

Plot sampling is to be conducted in three-quarter acre circular plots along parallel lines throughout the block, referred to as line-plot sampling. For all plots less than 5 acres, count and stage all trees within the block. The loss adjuster/inspector may also count and stage all trees within block greater than 5 acres whenever practical to do so.

| Necessary Supplies:                                       |   |
|---|---|
| Item  | Use   |
| Handheld compass  | Navigate line plots.  |
| Handheld GPS  | Measuring of block acreage. Recording plot center coordinates (GPS).  |
| Measuring wheel   | Measuring block acreage (instead of using GPS). Measuring between plots and between lines (unless the pacing method is selected). |
| Diameter tape measure                                     | Measuring tree diameter at DBH for staging<br>purposes (capable of measuring at least 30"<br>diameter trees).                     |
| Tape measure (large area)                                 | Measure plot radii and determine if a tree is in the plot ( $\geq$ 150 foot model).   |
| Clipboard, pens or pencils, and Sample Plot<br>Worksheets | Recording tree count and staging data.  |
| Calculator  | Various calculations.   |
| Chalk, flagging tape, paint, etc.                         | Marking trees once sampled.   |

### .

### **Preparation**

It is important to be familiar and comfortable with compass navigation. It is essential to be able to wheel measure (or pace) in a straight line and perform 90° turns using a compass.

The distances between plots and between lines are determined by pacing (chains) or by the use of a measuring wheel (feet). Distances are provided in both chains and feet in Exhibit 6, Table B. The pacing method is preferable under rough orchard floor conditions (e.g. grass, limb debris, etc.).

If the pacing method is to be used, it is necessary to practice pacing off a chain (s) prior to conducting line-plot sampling. A chain is a common agricultural acreage measurement equivalent to 66 feet. To practice, measure a straight path equal to a known number of chains. Pace this path to determine how many paces are required per chain. A pace is not equivalent to one step, but is rather the average of two steps. In other words, a pace is counted each time the same foot hits the ground. A natural walking gait is recommended because it will be more accurate and reliable than trying to an artificially maintain a step length such as 3 feet. Periodic measured checks throughout the sampling process are recommended to maintain accuracy.

### Plot Sampling – Native Orchards – No Distinguishable Planting Pattern (Continued)

#### **Acreage Measurement**

Block acreage measurements should be made using standard orchard acreage measurement methods such as acreage measuring wheel or handheld GPS. Acreage is measured at the drip line of perimeter trees. Large vacant areas within the block should be excluded from the acreage calculation, but must also be skipped during the sampling process.

### **Plot Layout**

The number of three-quarter acre plots to be sampled and plot spacing are determined using Exhibit 6, Table B and is based upon the block acreage. There are two options for measuring between plots and between lines, pacing (chains) or measuring wheel (feet). A measuring wheel (feet) may be used to measure between plots and between lines when orchard floor conditions allow. Grass, limb debris, etc. may make the use of a measuring wheel impractical. Under rough conditions, pacing is preferable. Refer to the Preparation section of this exhibit for information on pacing.

Use aerial maps, satellite imagery (i.e. using internet map sites) or other available maps showing an overview of the pecan orchard to determine the most efficient direction in which to establish plot lines. Begin the first line by selecting a convenient corner of the block as a starting point. From this starting point, pace two chains or measure 132 feet along the block perimeter perpendicular to the desired orientation for plot line establishment. Using a compass, turn 90° from this perimeter line toward the block. Use the compass to pace two chains or measure 132 feet into the block, and set the first plot center marker.

After sampling the first plot, proceed down the line in the same compass heading to the next plot using the "between plot" distance from Exhibit 6, Table B. Repeat plot sampling until reaching the block boundary. Turn 90° in the direction of the initial boundary track and pace or measure the "between line" distance from Exhibit 6, Table B to establish the beginning point of the next line. Turn 90° toward the block (a compass heading 180° from line previous line) and continue sampling. Plot spacing should be carried over from one plot line to the next as illustrated below.

For example, the between plot spacing is six chains and the last plot center on the first line is located two chains from the block boundary. The remaining four chains of plot spacing is measured once the subsequent line is established.

Repeat this process until the minimum number of plots have been located and sampled. Sampling should continue at the same plot spacing until the entire block has been sampled in situations where the minimum number of plots (from Exhibit 6, Table B) does not result in the entire the block being sampled. Plots should be established and sampled at each plot center regardless of tree count or terrain. Record the GPS coordinates of each plot center in the Sample Plot Worksheet (Exhibit 8).



### Plot Sampling - Native Orchards - No Distinguishable Planting Pattern (Continued)

Line-Plot Method Example Sources: Henning and Mercker (2009); Strimbu and Holley

### **Plot Sampling**

A fixed-radius plot is a circular plot created by the measured distance (radius) from the plot center. The radius of a three-quarter acre circular plot is 102 feet.

A tree will be considered to be "inside" the plot if its trunk is on or inside the plot boundary (plot radius). See the Fixed Radius Plot Illustration below. It is unnecessary to measure the distance from the plot center to the trunk of every tree. A measurement is only required for trees near the plot boundary. For each tree within a plot, perform the following:

#### Plot Sampling - Native Orchards - No Distinguishable Planting Pattern (Continued)

- (1) Count all trees and record on the Sample Plot Worksheet (Exhibit 8).
- (2) Measure the trunk of each tree for staging purposes in accordance with Section 24(A) and record in the Sample Plot Worksheet.



Fixed Radius Plot Illustration Sources: Henning and Mercker (2009); Strimbu and Holley

### Mirage Method

Use of the line-plot method can result in a plot center positioned near the block boundary. In such cases, the fixed radius plot may encompass areas outside of the block. The mirage method should be used to handle these situations. The mirage method is preferable to shifting the plot center so that the entire plot is established within the block.

Implement the mirage method when necessary, using the following steps:

- (1) Establish the three-quarter acre fixed radius plot based on the location of the plot center.
- (2) Count and stage all trees within the portion of the plot located within the block boundary. Do not count any trees located outside of the block boundary (e.g. separate block, different ownership, etc.) even if located within the plot.
- (3) Measure the distance from the plot center to the block boundary along a continuation of the line-plot line.
- (4) Then, continuing along the same line, measure from the block boundary outward the distance determined in step 3. This point is the mirage plot center.

### Plot Sampling – Native Orchards – No Distinguishable Planting Pattern (Continued)

- (5) From the mirage plot center, establish a three-quarter acre (mirage) plot.
- (6) Count and stage all trees that are in the area of overlap between the step 1 and step 5 plots that are inside the block boundary. Trees in this area will have already been counted in step 2 and should be counted again in this step.

The mirage method is illustrated below.



Mirage Method Illustration Source: Bell and Dilworth (2002)

### References

Bell, John F. and J.R. Dilworth. 2002. "Log Scaling and Timber Cruising." Oregon State University Press.

Henning, Jason G. and David C. Mercker. 2009. "Conducting a Simple Timber Inventory." The University of Tennessee Agricultural Extension Service. PB1780.

Strimbu, Bogdan M. and A. Gordon Holley. "Forest Measurements Field Manual." Louisiana Tech University School of Forestry.

### Form Standards - Sample Plot Worksheet for Native Orchards

Verify and/or make the following entries for each Sample Plot Worksheet element/item number. A completed Sample Plot Worksheet example is at the end of this exhibit. The unit/block designations, number of trees, and stages determined on this worksheet are used to complete the PAIR (PCT) as required by this handbook and to verify information contained on the insured's PAW (PCT), to prepare a revised PAW (PCT) when number of trees or stages change from year to year or to correct discrepancies discovered during an inspection (conducted for an appraisal or other purposes).

If a discrepancy in the unit/block designations, tree number, or stages is identified during an inspection, the Sample Plot Worksheet and instructions contained this exhibit will be used to correct unit/block discrepancies and make any applicable revisions on the PAIR (PCT) and PAW (PCT); and to complete the applicable unit/block entries on the Appraisal and Production Worksheets if a claim is filed. Any acreage report revisions will be made as provided in approved procedures in accordance with AIP instructions. (For SDT determinations associated with a claim, follow the instructions contained the Exhibit 8 of the PCT LASH.)

Complete the Sample Plot Worksheet and continuation sheet in the following order:

- (1) Part I Sample Plot Worksheet Heading
- (2) Part II Plot Sampling
- (3) Part III Calculations

### Part I – Sample Plot Worksheet Heading

Verify or make the following entries:

| F  | Element/Item Number | Description  |
|----|---------------------|--|
|    | Company             | Name of AIP, if not preprinted on the worksheet (Company Name).            |
|    | Claim Number        | MAKE NO ENTRY (unless completion of the worksheet is required              |
|    |                     | for loss adjustment purposes – see the PCT LASH, Exhibit 8).               |
| 1. | Name of Insured     | Name of insured that identifies EXACTLY the person (legal entity)          |
|    |                     | to whom the policy is issued.  |
| 2. | Policy Number       | Insured's assigned policy number.  |
| 3. | State               | Name of the state in which the trees are insured.                          |
| 4. | County              | Name of the county in which the trees are insured.                         |
| 5. | Crop/Type           | Four-digit crop code number and three-digit type code number, as           |
|    |                     | applicable, entered exactly as specified on the AD for the crop.           |
| 6. | Crop Year           | Crop year, as defined in the policy (e.g. YYYY).                           |
| 7. | Unit Number         | Eight-digit unit number from the Summary of Coverage after it is           |
|    |                     | verified to be correct (e.g. 00010000BU).                                  |
| 8. | Block Number        | A block of native pecan trees will be that acreage sharing a common        |
|    |                     | boundary without regard to any planting pattern.                           |
|    |                     | Enter the block number to the third decimal place (e.g. 001).              |
|    |                     | Enter the block number as identified on a Grove Identification Map         |
|    |                     | and an aerial photo(s) (e.g. FSA) or satellite imagery (e.g. GPS, Google). |

### Form Standards - Sample Plot Worksheet for Native Orchards (Continued)

# Part II – Plot Sampling

Verify or make the following entries:

| E   | lement/Item Number     | Description   |
|-----|------------------------|---|
| 9.  | Measured Acreage       | Enter the acres, rounded to the nearest tenth, determined by  |
|     |                        | measuring the block perimeter with either an acreage measuring  |
|     |                        | wheel or handheld GPS unit.   |
| 10. | Number of Plots        | Using the measured acreage from item 9, determine the number of plots to sample by referring to Exhibit 6, Table B.   |
| 11. | Distance Between Plots | Using the measured acreage from item 9, determine the distance<br>between plots by referring to Exhibit 6, Table B. Indicate the unit of<br>measure (feet or chains) to be used for sampling. The same unit of<br>measure must be used for both between plot and between line<br>spacing. |
| 12. | Distance Between       | Using the measured acreage from item 9, determine the distance  |
|     | Lines                  | between lines by referring to Exhibit 6, Table B. Indicate the unit of  |
|     |                        | measure (feet or chains) to be used for sampling. The same unit of  |
|     |                        | measure must be used for both between plot and between line spacing.  |
| 13. | Tree Diameter          | Enter, in inches, the trunk diameter of each tree sampled measured at 4.5 feet [diameter at breast height (DBH)] to the nearest tenth.  |
| 14. | Stage                  | The stage (I-V) of each tree sampled based on the diameter measurement from item 13.  |
| 15. | Plot Number            | Assign a reference number to each plot sampled.   |
| 16. | Plot Latitude °N       | Record the plot center latitude of each plot sampled using a handheld   |
|     |                        | GPS unit.   |
| 17. | Plot Longitude °W      | Record the plot center longitude of each plot sampled using a   |
|     |                        | handheld GPS unit.  |

### **Part III – Calculations**

Perform the following calculations:

| Element/Item Number |                   | Description  |
|---------------------|-------------------|--|
| 18.                 | Total Trees/Stage | Sum all trees from item 14 for all plots for the SDT, by stage,      |
|                     |                   | sampled in Part II and enter on the applicable.                      |
| 19.                 | Avg. No. of       | Divide the Total Trees/Stage for each stage from item 18 by the      |
|                     | Trees/Acre/Stage  | number of plots sampled. Divide this result by 0.75 to determine the |
|                     |                   | Average Number of Trees/Acre/Stage and round to the nearest          |
|                     |                   | hundredth (0.01).  |
|                     |                   |  |
|                     |                   | (Total Trees/Stage ÷ Number of Plots)                                |
|                     |                   | 0.75   |
|                     |                   |  |

### Form Standards - Sample Plot Worksheet for Native Orchards (Continued)

| Element/Item Number    |                        | Description  |
|------------------------|------------------------|--|
| 20. Total T            | rees/Stage             | Multiply the Average Number of Trees/Acre/Stage from item 19 by<br>the number of measured acres in item 9 to determine the number of<br>Total Trees/Stage and round to the nearest whole number.<br><i>Avg.No. of Trees per Acre/Stage × Measured Acreage</i>  |
| 21. Total T<br>SDT/ (d | rees/Stage/<br>claims) | MAKE NO ENTRY.   |
| 22. Total T            | rees/Block             | <ul> <li>Sum the Total Trees/Stage from item 20 for all stages to determine Total Trees/Block.</li> <li>(Dividing the item 20 entry for each stage by item 22 will be used to determine if the block qualifies as a stage-block (see Exhibit 2, stage-block definition. If not qualified for a stage-block, each separate stage for the block must be reported on the PAW (PCT). (See paragraph 24D.)</li> <li>Block entries in items 20 and 22 will be used to complete (and correct discrepancies, if applicable) the PAW (PCT), acreage report, PAIR (PCT), and applicable items on the Appraisal and Production Worksheets.</li> </ul> |

The following required entry is not illustrated on the Sample Plot Worksheet below.

|     | Element/Item<br>Number | Description  |
|-----|------------------------|--|
| 23. | Adjuster's Signature,  | Signature of adjuster, code number, and date signed. |
|     | Code Number, and       |  |
|     | Date                   |  |
## Form Standards - Sample Plot Worksheet for Native Orchards (Continued)

| COMPANY ANY COMPANY      |   |       |             |                  |              |                   |             |               |           | CLAIM       | A NO.                |                       |                      |               |          |             |                     |                            |             |               |       |             |                  |                   |
|--------------------------|---|-------|-------------|------------------|--------------|-------------------|-------------|---------------|-----------|-------------|----------------------|-----------------------|----------------------|---------------|----------|-------------|---------------------|----------------------------|-------------|---------------|-------|-------------|------------------|-------------------|
|                          | FOR ILLUSTRATION PURPOSES ONLY<br>NATIVE PECAN TREE SAMPLE PLOT WORKSHEET |       |             |                  |              |                   |             |               |           |             |                      |                       |                      |               |          |             |                     |                            |             |               |       |             |                  |                   |
| PART                     | I   |       |             |                  |              |                   |             |               |           |             |                      |                       | PART                 | ш             |          |             |                     |                            |             |               |       |             |                  |                   |
| 1 NA                     | ME OF IN  | SUREI | )           |                  |              |                   |             | I.M. I        | NSURE     | D           |                      |                       |                      |               |          | 18          | B TOTAL             | 19 AVG. NO. OF             | 20          | TOTAL         |       | 2           | 1 TOTAL          | 22 TOTAL          |
| 2 POLICY NUMBER XXXXXXXX |   |       |             |                  |              |                   |             | STAGE         |           |             | TREES/STAGE          |                       | TREES/ACRE/<br>STAGE | TREES/STAGE   |          | GE          | TRE<br>SE           | ES/STAGE/<br>OT (claims)   | TREES/BLOCK |               |       |             |                  |                   |
| 3 STATE ANY STATE        |   |       |             |                  |              |                   |             |               |           |             | Ι                    |                       |                      | 0             |          |             |                     |                            |             |               |       |             |                  |                   |
| 4 COUNTY ANY COUNTY      |   |       |             |                  |              |                   |             |               |           | П           |                      |                       | 0                    |               |          |             |                     |                            |             |               |       |             |                  |                   |
| 5 CROP/TYPE OXXX – XXX   |   |       |             |                  |              |                   |             |               |           | III         |                      |                       | 1                    | 0.33          |          | 5           |                     |                            |             | 107           |       |             |                  |                   |
| 6 CRO                    | OP YEAR   |       |             |                  |              |                   |             | Y             | YYY       |             |                      |                       |                      | IV            |          |             | 5                   | 1.67                       |             | 24            |       |             |                  | 187               |
| 7 UNI                    | T NUMB  | ER    |             |                  |              |                   |             | 0010          | 0000BU    |             |                      |                       |                      | v             |          |             | 33                  | 8 25                       |             | 157           |       |             |                  |                   |
| 8 BLC                    | OCK NUM   | IBER  |             |                  |              |                   |             |               | 001       |             |                      |                       |                      | v             |          |             | 55                  | 8.25                       |             | 157           |       |             |                  |                   |
| PAR                      | II  |       |             | Stages (trunk d  | liameter): S | stage I − ≤ 6     | inches;     | Stage I       | II – 6.01 | -10.0 in    | ches; Stage III – 10 | 0.01-15.0 inches; Sta | ge IV –              | 15.01-20      | .0 inche | es; Stag    | ge V -> 20.0        |                            |             |               |       |             |                  |                   |
|                          |   |       | 9           | Measured Acreas  | ge:          |                   |             |               |           | 14.4        |                      |                       |                      |               |          |             | 10 Number of Plots: |                            |             |               |       | 4           |                  |                   |
|                          |   |       | 11 Dista    | ance Between Plo | ts:          |                   |             |               | 5         | chains      | -                    | -                     |                      |               |          | 12 Dista    | ance Between Lines: |                            |             |               | 5     | chains      |                  |                   |
| Tree Number              | Tree Diameter   | Stage | Plot Number | Plot Latitude °N |              | Plot Longitude °W | Tree Number | Tree Diameter | Stage     | Plot Number | Plot Latitude °N     | Plot Longitude °W     | Tree Number          | Tree Diameter | Stage    | Plot Number | Plot Latitude °N    | Plot Longitude $^{\circ}W$ | Tree Number | Tree Diameter | Stage | Plot Number | Plot Latitude °N | Plot Longitude °W |
|                          | 13  | 14    | 15          | 16               |              | 17                |             | 13            | 14        | 15          | 16                   | 17                    |                      | 13            | 14       | 15          | 16                  | 17                         |             | 13            | 14    | 15          | 16               | 17                |
| 1                        | 34.9  | V     | 1           | XX° XX.XXX       | " XX° X      | XX.XXX'           | 21          | 30.5          | V         |             |                      |                       | 41                   |               |          |             |                     |                            | 61          |               |       |             |                  |                   |
| 2                        | 29.4  | V     |             |                  |              |                   | 22          | 32.1          | V         |             |                      |                       | 42                   |               |          |             |                     |                            | 62          |               |       |             |                  |                   |
| 3                        | 18.1  | IV    |             |                  |              |                   | 23          | 34.1          | V         |             |                      |                       | 43                   |               |          |             |                     |                            | 63          |               |       |             |                  |                   |
| 4                        | 20.3  | V     |             |                  |              |                   | 24          | 31.3          | V         |             |                      |                       | 44                   |               |          |             |                     |                            | 64          |               |       |             |                  |                   |
| 5                        | 29.0  | V     |             |                  |              |                   | 25          | 41.8          | V         | 3           | XX° XX.XXX'          | XX° XX.XXX'           | 45                   |               |          |             |                     |                            | 65          |               |       |             |                  |                   |
| 6                        | 28.5  | V     |             |                  |              |                   | 26          | 31.0          | V         |             |                      |                       | 46                   |               |          |             |                     |                            | 66          |               |       |             |                  |                   |
| 7                        | 26.8  | V     |             |                  |              |                   | 27          | 27.0          | V         |             |                      |                       | 47                   |               |          |             |                     |                            | 67          |               |       |             |                  |                   |
| 8                        | 12.5  | v     |             |                  |              |                   | 28          | 33.2          | V         |             |                      |                       | 48                   |               |          |             |                     |                            | 60          |               |       |             |                  |                   |
| 10                       | 24.5  | W N   |             |                  |              |                   | 30          | 24.0          | v         |             |                      |                       | 50                   |               |          |             |                     |                            | 70          |               |       |             |                  |                   |
| 11                       | 19.0  | īV    |             |                  |              |                   | 31          | 33.5          | v         |             |                      |                       | 51                   |               |          |             |                     |                            | 71          |               |       |             |                  |                   |
| 12                       | 20.2  | V     |             |                  |              |                   | 32          | 47.3          | v         |             |                      |                       | 52                   |               |          |             |                     |                            | 72          |               |       |             |                  |                   |
| 13                       | 33.2  | v     |             |                  |              |                   | 33          | 20.3          | v         |             |                      |                       | 53                   |               |          |             |                     |                            | 73          |               |       |             |                  |                   |
| 14                       | 18.9  | IV    |             |                  |              |                   | 34          | 30.8          | v         | 4           | XX° XX.XXX'          | XX° XX.XXX'           | 54                   |               |          |             |                     |                            | 74          |               |       |             |                  |                   |
| 15                       | 25.1  | v     |             |                  |              |                   | 35          | 24.3          | v         |             |                      |                       | 55                   |               |          |             |                     |                            | 75          |               |       |             |                  |                   |
| 16                       | 19.6  | IV    |             |                  |              |                   | 36          | 25.2          | V         |             |                      |                       | 56                   |               |          |             |                     |                            | 76          |               |       |             |                  |                   |
| 17                       | 20.8  | v     |             |                  |              |                   | 37          | 36.8          | v         |             |                      |                       | 57                   |               |          |             |                     |                            | 77          |               |       |             |                  |                   |
| 18                       | 19.5  | IV    |             |                  |              |                   | 38          | 31.3          | V         |             |                      |                       | 58                   |               |          |             |                     |                            | 78          |               |       |             |                  |                   |
| 19                       | 22.8  | v     | 2           | XX° XX.XXX       | XX° X        | XX.XXX'           | 39          | 37.1          | V         |             |                      |                       | 59                   |               |          |             |                     |                            | 79          |               |       |             |                  |                   |
| 20                       | 28.4  | v     |             |                  |              |                   | 40          |               |           |             |                      |                       | 60                   |               |          |             |                     |                            | 80          |               |       |             |                  |                   |

Pg. \_1\_ of \_2\_ Pgs

(For Illustration Purposes Only) This form example does not illustrate all required entry items (e.g. signatures, etc.). See DSSH for applicable statements.

## Form Standards - Sample Plot Continuation Worksheet for Native Orchards (Continued)

| 1 NAME OF INSURED           |               |       |             | 2 POLICY NUMBER     |                   |             |               |                            | 3 STATE     |                  |                   |             |               |       | 4 C0        | 4 COUNTY           |                   |             |               |       |             |                  |                   |
|-----------------------------|---------------|-------|-------------|---------------------|-------------------|-------------|---------------|----------------------------|-------------|------------------|-------------------|-------------|---------------|-------|-------------|--------------------|-------------------|-------------|---------------|-------|-------------|------------------|-------------------|
| 5 CROP/TYPE                 |               |       |             | 6 CROP YEAR         |                   |             |               |                            |             | 7 UNIT NUMBER    |                   |             |               |       |             | 8 BI               | 8 BLOCK NUMBER    |             |               |       |             |                  |                   |
| 9 FOR LOSS APPRAISAL YES NO |               |       |             |                     | NO NO             | 1           |               |                            |             |                  |                   | 1           |               |       |             |                    |                   | -           |               |       |             |                  |                   |
| ·                           |               |       | 0.1         | Measured Agrange    |                   | -           |               |                            |             |                  |                   |             |               |       | 1           | 0 Number of Ploto  |                   |             |               |       |             |                  |                   |
| Y interstate Acteage:       |               |       |             |                     |                   |             |               | 12 Distance Between Lines: |             |                  |                   |             |               |       |             |                    |                   |             |               |       |             |                  |                   |
|                             |               |       | 1 Dista     | nee between 1 iots. |                   |             |               |                            |             |                  |                   |             |               | 1     | 2 Distai    | ice between Enles. |                   |             |               |       |             |                  |                   |
| Tree Number                 | Tree Diameter | Stage | Plot Number | Plot Latitude °N    | Plot Longitude °W | Tree Number | Tree Diameter | Stage                      | Plot Number | Plot Latitude °N | Plot Longitude °W | Tree Number | Tree Diameter | Stage | Plot Number | Plot Latitude °N   | Plot Longitude °W | Tree Number | Tree Diameter | Stage | Plot Number | Plot Latitude °N | Plot Longitude °W |
|                             | 13            | 14    | 15          | 16                  | 17                |             | 13            | 14                         | 15          | 16               | 17                |             | 13            | 14    | 15          | 16                 | 17                |             | 13            | 14    | 15          | 16               | 17                |
| 81                          |               |       |             |                     |                   | 113         |               |                            |             |                  |                   | 145         |               |       |             |                    |                   | 177         |               |       |             |                  |                   |
| 82                          |               |       |             |                     |                   | 114         |               |                            |             |                  |                   | 146         |               |       |             |                    |                   | 178         |               |       |             |                  |                   |
| 83                          |               |       |             |                     |                   | 115         |               |                            |             |                  |                   | 147         |               |       |             |                    |                   | 179         |               |       |             |                  |                   |
| 84                          |               |       |             |                     |                   | 116         |               |                            |             |                  |                   | 148         |               |       |             |                    |                   | 180         |               |       |             |                  |                   |
| 85                          |               |       |             |                     |                   | 117         |               |                            |             |                  |                   | 149         |               |       |             |                    |                   | 181         |               |       |             |                  |                   |
| 86                          |               |       |             |                     |                   | 118         |               |                            |             |                  |                   | 150         |               |       |             |                    |                   | 182         |               |       |             |                  |                   |
| 87                          |               |       |             |                     |                   | 119         |               |                            |             |                  |                   | 151         |               |       |             |                    |                   | 183         |               |       |             |                  |                   |
| 88                          |               |       |             |                     |                   | 120         |               |                            |             |                  |                   | 152         |               |       |             |                    |                   | 184         |               |       |             |                  |                   |
| 89                          |               |       |             |                     |                   | 121         |               |                            |             |                  |                   | 153         |               |       |             |                    |                   | 185         |               |       |             |                  |                   |
| 90                          |               |       |             |                     |                   | 122         |               |                            |             |                  |                   | 154         |               |       |             |                    |                   | 186         |               |       |             |                  |                   |
| 91                          |               |       |             |                     |                   | 123         |               |                            |             |                  |                   | 155         |               |       |             |                    |                   | 187         |               |       |             |                  |                   |
| 92                          |               |       |             |                     |                   | 124         |               |                            |             |                  |                   | 156         |               |       |             |                    |                   | 188         |               |       |             |                  |                   |
| 93                          |               |       |             |                     |                   | 125         |               |                            |             |                  |                   | 157         |               |       |             |                    |                   | 189         |               |       |             |                  |                   |
| 94                          |               |       |             |                     |                   | 126         |               |                            |             |                  |                   | 158         |               |       |             |                    |                   | 190         |               |       |             |                  |                   |
| 95                          |               |       |             |                     |                   | 127         |               |                            |             |                  |                   | 159         |               |       |             |                    |                   | 191         |               |       |             |                  |                   |
| 96                          |               |       |             |                     |                   | 128         |               |                            |             |                  |                   | 160         |               |       |             |                    |                   | 192         |               |       |             |                  |                   |
| 97                          |               |       |             |                     |                   | 129         |               |                            |             |                  |                   | 161         |               |       |             |                    |                   | 193         |               |       |             |                  |                   |
| 98                          |               |       |             |                     |                   | 130         |               |                            |             |                  |                   | 162         |               |       |             |                    |                   | 194         |               |       |             |                  |                   |
| 99                          |               |       |             |                     |                   | 131         |               |                            |             |                  |                   | 163         |               |       |             |                    |                   | 195         |               |       |             |                  |                   |
| 100                         |               |       |             |                     |                   | 132         |               |                            |             |                  |                   | 164         |               |       |             |                    |                   | 196         |               |       |             |                  |                   |
| 101                         |               |       |             |                     |                   | 133         |               |                            |             |                  |                   | 165         |               |       |             |                    |                   | 197         |               |       |             |                  |                   |
| 102                         |               |       |             |                     |                   | 134         |               |                            |             |                  |                   | 166         |               |       |             |                    |                   | 198         |               |       |             |                  |                   |
| 103                         |               |       |             |                     |                   | 135         |               |                            |             |                  |                   | 167         |               |       |             |                    |                   | 199         |               |       |             |                  |                   |
| 104                         |               |       |             |                     |                   | 136         |               |                            |             |                  |                   | 168         |               |       |             |                    |                   | 200         |               |       |             |                  |                   |
| 105                         |               |       |             |                     |                   | 137         |               |                            |             |                  |                   | 169         |               |       |             |                    |                   | 201         |               |       |             |                  |                   |
| 106                         |               |       |             |                     |                   | 138         |               |                            |             |                  |                   | 170         |               |       |             |                    |                   | 202         |               |       |             |                  |                   |
| 107                         |               |       |             |                     |                   | 139         |               |                            |             |                  |                   | 171         |               |       |             |                    |                   | 203         |               |       |             |                  |                   |
| 108                         |               |       |             |                     |                   | 140         |               |                            |             |                  |                   | 172         |               |       |             |                    |                   | 204         |               |       |             |                  |                   |
| 109                         |               |       |             |                     |                   | 141         |               |                            |             |                  |                   | 173         |               |       |             |                    |                   | 205         |               |       |             |                  |                   |
| 110                         | 1             |       |             |                     |                   | 142         |               |                            |             |                  |                   | 174         |               |       |             |                    |                   | 206         |               | 1     |             |                  |                   |

Pg. \_2\_ of \_2\_ Pgs

(For Illustration Purposes Only) This form example does not illustrate all required entry items (e.g. signatures, etc.). See DSSH for applicable statements.

## Average Revenue Value and Maximum and Minimum Actual CTV Reference Prices Examples

| DIGUDEDIG MANE & ADDDI           |  |  |  |  |   |  |  |  |  |  |
|----------------------------------|--|--|--|--|---|--|--|--|--|--|
| INSURED'S NAME & ADDRI           | ESS:   | S: AGENCY OR SERVICING OFFICE:   |  |  |   |  |  |  |  |  |
| I. M Insured                     |  | Any Agency   |  |  |   |  |  |  |  |  |
| PHONE: XXX-XXX-XXXX              |  | PHONE: XXX<br>XXXX   | -XXX-XXX   | X AGENT CODE :   |   |  |  |  |  |  |
| OTHER PERSON:                    |  | INSURANCE PROVIDER:  |  |  |   |  |  |  |  |  |
|                                  |  | Any Company  |  |  |   |  |  |  |  |  |
|                                  | TRAL   | PHONE: XXX   | -XXX-XXX   | K COMPAN   | NY CODE: XX   |  |  |  |  |  |
| FSA FN:                          | SECTIO   | DESCRIPTION:<br>N TOWN   | SHIP   | RANGE  | PRACTICE:   |  |  |  |  |  |
|                                  |  |  | r  |  |   |  |  |  |  |  |
| COUNTY:<br>Any County            | STATE:<br>Any Stat   | e  |  | PRE-ACCEPTA<br>PERENNIAL C<br>INSPECTION F   | NCE<br>ROP<br>REPORT DATE:  |  |  |  |  |  |
| POUNDS PRODUCTION                | GRO  | DSS SALES  | AVERA<br>SALES   | GE GROSS<br>PER TREE   | PRE-<br>HARVEST<br>APPRAISAL  |  |  |  |  |  |
| 3<br>86 591                      |  | 4<br>95.250  | (  | 5<br>95 25   | 0   |  |  |  |  |  |
| 105,815                          |  | 142,850  | 1  | 42.85  |   |  |  |  |  |  |
| 135,950                          |  | 135,950  | 1  | 30.95  |   |  |  |  |  |  |
| 73966                            |  | 110,950  | 1  | 10.95  |   |  |  |  |  |  |
|                                  |  |  |  |  |   |  |  |  |  |  |
|                                  |  |  |  |  |   |  |  |  |  |  |
|                                  |  |  |  |  |   |  |  |  |  |  |
|                                  |  |  |  |  |   |  |  |  |  |  |
|                                  |  |  |  |  |   |  |  |  |  |  |
|                                  |  |  |  |  |   |  |  |  |  |  |
|                                  |  |  |  |  |   |  |  |  |  |  |
|                                  |  |  |  |  |   |  |  |  |  |  |
|                                  |  |  |  |  |   |  |  |  |  |  |
|                                  |  |  |  |  |   |  |  |  |  |  |
|                                  |  |  |  |  |   |  |  |  |  |  |
|                                  |  |  |  |  |   |  |  |  |  |  |
|                                  |  |  |  |  |   |  |  |  |  |  |
|                                  |  |  |  |  |   |  |  |  |  |  |
|                                  |  |  |  |  |   |  |  |  |  |  |
| 7. TOTAL NUMBER<br>OF YEARS<br>4 | 8. TOTA<br>SALE  | L AVERAGE GR<br>S PER <del>ACRE</del> -TRI<br>480.00   | OSS<br>EE  | 9 <del>. APPROV</del><br>REVENU<br><del>ACRE</del><br>See Cal  | ED AVERAGE<br>JE VALUE <sup>1</sup> PER<br>lculation Sheet  |  |  |  |  |  |
|                                  | INSURED'S NAME & ADDRI<br>I. M., Insured<br>PHONE: XXX-XXX-XXXX<br>OTHER PERSON:<br>FSA FN:<br>COUNTY:<br>Any County<br>POUNDS PRODUCTION<br>3<br>86,591<br>105,815<br>135,950<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>73966<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>7396<br>74000000000000000000000000000000000000 | INSURED S NAME & ADDRESS.<br>I. M. Insured<br>PHONE: XXX-XXX-XXXX<br>OTHER PERSON:<br>FSA FN:<br>LEGAL<br>SECTIO<br>COUNTY:<br>Any County<br>POUNDS PRODUCTION<br>GRO<br>3<br>86,591<br>105,815<br>135,950<br>73966<br>1<br>105,815<br>135,950<br>73966<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1 | INSURED S NAME & ADDRESS. AGENC FOR S   I. M Insured Any Agency   PHONE: XXX-XXXX PHONE: XXX   OTHER PERSON: INSURANCE F   Any Compar PHONE: XXX   FSA FN: LEGAL DESCRIPTION:   COUNTY: Any State   Any County GROSS SALES   3 4   86,591 95,250   105,815 142,850   135,950 135,950   73966 110,950   Image: Count of the state of | INSURED 3 NAME & ADDRESS. ANGENCT OR SERVICING   I. M., Insured Any Agency   PHONE: XXX-XXX-XXXX PHONE: XXX-XXX-XXXX   OTHER PERSON: INSURANCE PROVIDER:   Any Company PHONE: XXX-XXX-XXXX   PROME: XXX-XXX-XXXX PHONE: XXX-XXX-XXXX   FSA FN: LEGAL DESCRIPTION:   COUNTY: STATE:   Any County Ary State   POUNDS PRODUCTION GROSS SALES AVERA   SA FS 4   ************************************ | INSURED'S NAME & ADDRESS. AGENCTOR SERVEUNO OFFICE.   I. M., Insured Any Agency   PHONE: XXX-XXXX PHONE: XXX-XXXX   OTHER PERSON: INSURANCE PROVIDER:   Any Company PHONE: XXX-XXXX   PHONE: XXX-XXXX COMPAN   FSA FN: LEGAL DESCRIPTION:   SECTION TOWNSHIP   RANGE PRE-ACCEPTA   Any County Any State   POUNDS PRODUCTION GROSS SALES   AVERAGE GROSS SALES PER TREE   3 4   5 86,591   95,250 95,25   105,815 142,850   135,950 135,950   135,950 130,95   73966 110,950   INOUTION Integen to the second to the secon |  |  |  |  |  |

Average Revenue Value Calculation Example

<sup>1</sup>The Average Revenue Value would be entered in item 9 if the orchard contained a single stage. If there is more than one stage of insurable trees, the Average Revenue Value for each stage will be calculated as shown in Average Revenue Value Calculation Example contained in this exhibit.

Average Revenue Value Calculation Example – For orchards containing more than one tree stage

The pecan orchard contains 1000 insurable improved variety trees consisting of stage II, III, and V trees. The insured provides the most recent four years of acceptable sales records.

The average gross sales per tree are:

| Crop Year |                 |
|-----------|-----------------|
| 2015      | \$95.25         |
| 2014      | \$142.85        |
| 2013      | \$130.95        |
| 2012      | <u>\$110.95</u> |

Avg. Gross Sales\$120.00

Using the factor table contained in the CTVE:

| Stage        | II   | III  | IV    | V     |
|--------------|------|------|-------|-------|
| Stage Factor | .433 | .888 | 1.039 | 1.385 |

The average revenue value for each stage is:The reference revenue value for eachstage is:Stage II:  $$120.00 \times .433$  (stage factor) = \$51.96Stage II: \$34.10Stage III:  $$120.00 \times .888$  (stage factor) = \$106.56Stage III: \$79.43Stage V:  $$120.00 \times 1.689$  (stage factor) = \$202.68Stage V: \$232.46

<u>Maximum and Minimum Actual CTV Reference Price Calculation Example</u> – For orchards containing single or multiple stages

| Preliminary maximum actual          |   |   |
|-------------------------------------|---|---|
| CTV reference price                 | = | Stage II = $$259 = {(\$51.96 \div \$34.10) \times (\$102 \div 0.60)}$                                     |
|                                     |   | Stage III = $474 = \{(106.56 \div 79.43) \times (212 \div 0.60)\}$  |
|                                     |   | Stage V = $\$684 = \{(202.68 \div \$232.46) \times (\$471 \div 0.60)\}$                                   |
| Maximum actual                      |   |   |
| CTV reference Price                 | _ | Stage II $-$ \$187 {the lesser of the preliminary price \$259 or  |
|                                     | _ | $(102 \times 1.833)$  |
|                                     |   | Stage III = $389$ {the lesser of the preliminary price $474$ or $389$<br>( $212 \times 1.833$ )}          |
|                                     |   | Stage V = $684 \{ \text{the lesser of the preliminary price } 684 \text{ or } 863 ($471 \times 1.833) \}$ |
| Dualizzia anno aciminatore a staral |   |   |
| Preliminary minimum actual          |   |   |
| <u>CTV reference price</u>          | = | Stage II = $\$198 (\$51.96 \div \$34.10) \times (\$78 \div 0.60)$   |
|                                     |   | Stage III = $396 (106.56 \div 79.43) \times (177 \div 0.60)$  |
|                                     |   | Stage V = $661 (202.68 \div 232.46) \times (455 \div 0.60)$   |
| Minimum actual                      |   |   |
| CTV reference price                 | = | Stage II = $$143$ {the lesser of the preliminary price \$198 or \$143                                     |
|                                     |   | $(\sqrt[3]{0} \times 1.055)$  |
|                                     |   | Stage III = $524$ {the lesser of the preliminary price $5396$ or $524$<br>( $177 \times 1833$ )}          |
|                                     |   | $(\psi_1 / 1 \wedge 1.000)$<br>Stage V = \$661 (the larger of the proliminary price \$661 or \$824        |
|                                     |   | Stage $v = 0.01$ {the lesser of the preliminary price 0.001 of 0.0034                                     |
|                                     |   | $\{\varphi_{JJ} \times 1.000\}$   |

## **Reference Pictures**

The following reference pictures represent examples of pecan trees under various conditions. The pictures and subtitles of each picture are intended to provide a general description of these conditions and an estimate of the degree of leaning, as applicable. Actual tree and damage conditions could be different than the conditions represented by pictures contained in this exhibit.



Picture 1: Leaning tree at approximately 24 degrees (courtesy of Dr. Bill Goff)



Picture 2: Leaning tree at approximately 37 degrees (courtesy of Producers Higbee, Underwood, Buck, and Dr. Bill Goff)



Picture 3: Leaning tree at approximately 48 degrees (Higbee et al.)



Picture 4: Uprooted (toppled) tree (courtesy of Dr. Bill Goff)



Picture 5: Reset tree (Higbee et al.)



Picture 6: Grafted low and planted too deep (Goff)



Picture 7: Grafted high and planted at the proper depth – well developed, wind resistant brace roots with the graft union 3 feet above ground level (Goff)



Picture 8: Grafted high and planted at the proper depth – brace roots are less developed and only moderately resistant to wind damage (Goff)



Picture 9: Tree planted at the proper depth with developed brace roots – damaged canopy vs. uprooted tree (Goff)



Picture 10: Drought death (courtesy of Monte Nesbitt)



Picture 11: Drought death (Nesbitt)



Picture 12: Drought Damage - Die-back (AgriLogic)



Picture 13: Drought Damage - Die-back (AgriLogic)



Pictures 14 & 15: Drought stress (courtesy of Dr. William Reid, Northern Pecans)



Pictures 16: Drought stress (Reid)



Picture 17: Tree planted in a wet area – poor root system (Goff)