**Nursery Landscape CDE**

**Purpose**

The Nursery Landscape Career Development Event stimulates career interest, encourages proficiency development, and recognizes excellence in nursery practices and landscaping through the agricultural education curriculum. The event includes all aspects of the industry in producing, marketing, utilizing, and maintaining landscape plants in addition to related products, equipment, and services.

Objectives of this event include:

(1) identification of landscape plant material and plant disorders,

(2) utilization of cultural practices such as growing techniques,

(3) design and construction of landscapes, and

(4) demonstration of effective written and oral communication skills.

**Sponsor**

This event is currently sponsored by the North Carolina Nursery and Landscape Association and Wilkes Community College.

**Superintendent**

The superintendent for this event is Mr. Jason Davis, State FFA Coordinator, Department of Agricultural and Human Sciences, NCSU Box 7654, Raleigh, NC 27695-7654 Phone: 919.513.0216 Fax: 919.513.3201 Email: jason\_davis@ncsu.edu

**Eligibility**

This event is open to all FFA chapters and FFA members in good standing. FFA Members may not participate in a Career Development Event that leads to a state level event after July 1, following their high school/early college graduation. Members winning a previous state event in this area or that have participated in a previous national event in this area are ineligible. This event will be held during the North Carolina State FFA Convention.

**Teams shall consist of three or four members. Four scores will count towards the team total (A three-member team will earn a zero for the 4th score).**No alternates are allowed in state events. Any alternate found participating in a state event will result in total team disqualification.

The top three individuals in the regional event are eligible to participate in the state event as individuals regardless of their team placing.

The use or possession of cellular phones, Personal Digital Assistants (PDA’s) or any other mobile electronic communication device is prohibited during any state-level career development event. Any violation of this rule by any team member will result in total team disqualification.

FFA members participating in career development events that require the use of calculators may only use non programmable/graphing calculators that do not have the ability to communicate with other calculators. Calculators will be screened prior to the start of a CDE for acceptability. Students caught using data stored on a calculator or communicating with other calculators will result in a total team disqualification for the event.

Any member found cheating in any state-level career development event will result in total team disqualification for that event.

At the North Carolina FFA State Convention, participation in more than one FFA CDE event is permitted as long as events are not being held concurrently and no special previsions are required to facilitate participation with the exception that parliamentary procedure and public speaking and parliamentary procedure and Creed speaking which are held concurrently will allow dual participation and special provisions for flighting.

**State Career Development Event Participation**

The appropriate numbers of teams based on event participation from each region are eligible to compete in the state career development event. The top three individuals in the regional event are eligible to participate in the state event as individuals regardless of their team placing. Teams and individuals advancing to state event participation must be certified by the regional FFA advisor.

**Dress Code**

Participants are required to follow the North Carolina FFA Career Development Event Dress Code. A ten percent reduction in the total team score will be taken if a participant violates the dress code. Participants are allowed to wear long pants, an appropriate shirt with a collar or an appropriate high school or FFA t-shirt.

**Procedures for Administering the Event**

The general knowledge test and the identification activity will be the same for both the Floriculture and Nursery/Landscape Events at the regional level. At the state level, the identification for both events will be the same. There will be separate written tests at the state-level for the events.

Under no circumstances will any participant be allowed to touch or handle plant materials during the identification portion of the event. Any infraction of this rule will be sufficient cause to give that individual a zero on that phase of the event.

Any communication between participants during the event that would constitute giving help to that individual would result in both individuals getting a zero on that phase of the event. If an individual is suspected of copying someone else’s paper, the participant will be given a personal quiet warning and if cheating continues, the one copying would be given a zero on that phase of the event.

To facilitate the holding of the scorecards, participants are allowed and encouraged to bring and use clipboards. These should be submitted to an event official to determine that they are free of written materials that might help a participant in the event. Identification papers and tests will be different colored papers for each of the two horticulture events.

**Regional Event Set-Up**

The host school will have the responsibility in setting up the career development event, choosing career development event officials, judges and materials according to the following:

**Part 1: Identification (250 points)**

Twenty-five plants will be chosen from the current list of ID plants and each plant will be numbered. Each contestant will be assigned a plant to begin the identification portion of the contest. Each contestant will remain at each plant for one minute then progress on to the next plant. No contestant will be permitted to return to a plant for a second time. Each plant will be worth 10 points and no plant will be used twice. Event officials will grade papers. Grading will be done by giving 10 points for each plant correctly identified. If it is observed that a participant uses the same number on their paper twice, neither number will be counted correct. 25 minutes.

**Part 2: Knowledge test (250 points)**

A written knowledge test will be made up by the state staff or the horticulture staff at N. C. State University consisting of 25 multiple choice questions. The same test will be used in both the Floriculture and Nursery/Landscape Events. The answer to these questions must be available in at least one of the references on the event reference list. The contestants will be given 25 minutes to complete the test and each question will be valued at 10 points. Copies of written tests will not be made available to teachers until the summer following the events.

**Part 3: Practicum (50 points)**

Each participant will be asked to measure the diameter of five trees suitable for sale in an established nursery. Each student will be given a caliper and a ruler to use in completing this practicum. A student will start at plant number one and proceed to plant number two at the end of the first minute. At the same time, a second participant will start at plant number one. Students will rotate in this manner so that one student finishes and another student starts at the end of each minute. Students will continue in this manner until all participants in a group have completed the practicum. The students will record their answers and event officials will grade the participant’s work. Students may earn a maximum of ten points per plant for a total score of fifty points. (Reference: American Standards for Nursery Stock.

Scoring Regional Event

*Maximum Score 550*

Identification 250

Knowledge Test 250

Practicum 50

**State Event Set-Up**

The FFA Executive Secretary or Horticulture consultant shall be responsible for setting up the event, choosing event officials, judges and materials according to the following:

**Part 1: Identification (500 points)**

Fifty plants will be chosen from the current list of ID plants and each plant will be numbered. Each participant will be assigned a plant to begin identification. Each participant will remain at each plant for one minute then progress on to the next plant. No participant will be permitted to return to a plant a second time. Handling the plant will result in the student receiving a zero on plant ID. Grading will be done by giving 10 points for each plant correctly identified. It is observed that a contestant uses the same number on their ID paper twice, neither number will be counted correct resulting in a penalty for using the same number. Teachers will grade the papers but should not grade papers of their own team.

**Part 2: Knowledge test (500 points)**

A written test will be made up by the state staff or horticulture staff at North Carolina State University. The test will consist of 30 multiple choice questions the answers to which must be found in at least one of the references on the event reference list. The test will consist of 30 general horticulture questions and 20 questions specific to the area of nursery landscape. The participants will be given 50 minutes to complete the test and each question will be valued at 10 points. Event officials will grade the papers. Agricultural Education Teachers should not see or have a copy of the test until the summer. No question should be used two years consecutively. 50 Minutes.

**Part 3: Practicum (100 points)**

This test is to be made up by state staff or horticulture staff at North Carolina State University and will consist of ten landscape situations to answer or solve with multiple choice answers given. Each question is worth ten points. At least three and not more than five of these questions should involve reading to a scale, calculations such as square feet, cubic feet, cubic yards, square yards, a number of plants required or costs of items including tax and discount rates. If a ruler is required, it is to be provided by event officials. No participants will be given extra time. 30 Minutes.

**Part 4: Problem Solving (100 points)**

Each student will be given a 10 question multiple choice problem solving test concerning floral plants, products, or situations. Each question will be worth 10 points. Event officials will grade these papers. Some examples of these types of questions are as follow:

Example 1:
The plant sitting before you has twenty numbered tags indicating a possible pruning cut. What are the five primary cuts?

A. 2, 17, 14, 10, 6

B. 1, 10, 20, 12, 19

C. 4, 7, 13, 16, 2, 1

D. 7, 12, 4, 18, 11

Example 2:
The student is presented with some type of pest (insect, weed, and disease). Sitting in front of the participant will be four pesticides or the pesticides labels. Which of the pesticides could be used to control or eliminate the pest?

A. Use Roundup

B. Use A Rest

C. Use Methyl Bromide

D. Use Talstar

**Official Caliper Rule**

From the American Standards of Nursery, “Caliper measurement of the trunk shall be taken six inches above the ground up to and including four-inch caliper size. If the caliper at six inches above the ground exceeds four inches, the caliper should be measured at 12 inches above the ground.”

**Scoring State Event**

*Maximum Score 1200*

Identification 500

Knowledge Test 500

Practicum 100

Problem Solving 100

**Procedure for Determining the State Event Winner When Scores are Tied**

In the event a tie score exists, apply the following methods in sequential order until the tie is broken:

1. Compare the alternate scores. The lowest team member score is the alternate score.
2. Compare the total team scores for the problem solving component and the higher scoring team is the winner.
3. If scores continue to be tied compare the total team scores for the Identification component and the higher scoring team is the winner.
4. If scores continue to be tied compare the total team score for the knowledge test and the higher scoring team is the winner.
5. If these methods fail to break the tie, co-winners will be declared and a run-off event will be held to determine which team will represent North Carolina at the National FFA Convention. The run-off event will follow the same rules as the state event.

Special Note: In the event a tie exists between first, second or third place teams on the regional level, the tied teams will be allowed to participate in the state event.

**State Awards**

The following awards will be presented annually at the state FFA convention provided sponsorship is available:

State Winning Team

*Cash award and first place team pins & plaque*

 Second Place Team

*Second place team pins & plaque*

 Third Place Team

*Third place team pins & plaque*

High Scoring Individual

*Plaque*

**National Career Development Event Participation**

State winning teams advancing to the national career development event will be automatically registered for the national event. It is the responsibility of the FFA Chapter Advisor to complete all necessary national certification and waiver forms and return them to the state FFA Coordinator by the assigned due date.

State winning CDE teams that choose not to participate at the national level should contact the state office by Sept. 1 prior to national convention. Teams that fail to inform the state office prior to Sept 1 will be ineligible to participate in that same CDE for the next year (chapters may appeal to the State FFA Board of Directors). Teams that do not compete at the National Convention will be required to pay back the cash travel award.

**References**

Tests used in previous state events are available to instructors who wish to use them as instructional aids. Please use the appropriate form included in Section Four of the State Guide to FFA Activities to request these materials.

Landscape Plants of the Southeast, Halfacre, Gordon, The Sparks Press.

A Guide to Field Identification‑Trees of North America, C. Frank Brockman, 168 Golden Press, New York.

\*Nursery Production ‑ A Student Handbook, 1988, Department of Ag Ed., Penn State University, University Park, Pennsylvania 16802.

\*Greenhouse Crop Production Revised ‑ A Student Handbook, 1983 Department of Ag.Ed, Penn State University, University Park, Pennsylvania 16802.

\*Floral Design and Marketing, Gary Anderson, The Ohio State University, 2120 Fyffe Road. Columbus. Ohio. 43210.

Landscaping Your Home, Revised Edition‑Circular III, Nelson, Jr., William R., University of Illinois, Urbana, Illinois.

\*Carolina Lawns, Circular Ag‑69, North Carolina Extension Service.

\*Mathematics for Horticulture‑Student Manual, 1982, The Ohio State University, 2120 Fyffe Road, Columbus, Ohio, 43210, $4.95.

\*Landscaping: Principles and Practices, Third Edition, by Ingels, Delmar Publishers, 1987.

\*Working in Horticulture, By Moore and Richardson, Gregg/McGraw Hill Book Co., 1980. Activity Guide, Teacher's Manual.

\*Introductory Horticulture, Third Edition, by Riley and Shry, Delmar Publishers, 1987.

American Standard For Nursery Stock, Published by the American Association of Nurserymen, Inc., 1986,1250 I Street, Suite 500, Washington, D.C. 20005.

\*These references will be used primarily as sources for test items. Others are for use by teachers primarily.

Official Plant Identification List

NC FFA Floriculture & Nursery/Landscape Contests

Plant specimens will be numbered 1-25 for the Regional Contest and 1-50 for the State Contest. Contestant is to write the appropriate number in the space beside the name of the specimen.

Contestant Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Contestant #\_\_\_\_\_\_\_\_Score\_\_\_\_\_\_

\_\_\_\_\_\_Abelia X grandiflora/Glossy Abelia

\_\_\_\_\_\_Acer palmatum/Japanese Maple

\_\_\_\_\_\_Acer platanoides/Norway Maple

\_\_\_\_\_\_Acer rubrum/Red Maple

\_\_\_\_\_\_Ageratum mexicanum/Ageratum

\_\_\_\_\_\_Aglaonema commutatum/ Aglaonema

\_\_\_\_\_\_Ajuga reptans/Ajuga
\_\_\_\_\_\_Alstroemeri aurantiaca/Peruvian Lily

\_\_\_\_\_\_Antirrhinum majus cv./Snapdragon
\_\_\_\_\_\_Anthurium x andraenum/Anthurium

\_\_\_\_\_\_Araucaria heterophylla/Norfolk Island Pine

\_\_\_\_\_\_Asparagus densiflorus 'Sprengeri'/

 Sprengeri Fern

\_\_\_\_\_\_Asparagus setaceus/Plume Asparagus Fern

\_\_\_\_\_\_Astilbe cv./Astilbe Hybrids

\_\_\_\_\_\_Aucuba japonica/Japanese Aucuba

\_\_\_\_\_\_Begonia X semperflorens‑cultorum/

 Wax Begonia

\_\_\_\_\_\_Berberis thunbergii/Japanese Barberry

\_\_\_\_\_\_Betula nigra/River Birch

\_\_\_\_\_\_Buddleia davidii/Butterfly Bush

\_\_\_\_\_\_Buxus microphylla var. japonica/

 Japanese Boxwood

\_\_\_\_\_\_Buxus sempervirens/Common Boxwood
\_\_\_\_\_\_Caladium x hortuanum cv./Fancy Leaved Caladium

\_\_\_\_\_\_Camellia japonica cv./Common Camellia

\_\_\_\_\_\_Camellia sasanqua/Sasanqua Camellia

\_\_\_\_\_\_Canna X generalis/Canna

\_\_\_\_\_\_Catharanthus roseus/Madagascar Periwinkle

\_\_\_\_\_\_Cattleya cv./Cattleya Orchid Hybrid
\_\_\_\_\_\_Celosia argentea cv./Cockscomb

\_\_\_\_\_\_Cercis canadensis/Eastern Red Bud

 - Judas Tree

\_\_\_\_\_\_Chamaecyparis pisifera “Gold Mop”

\_\_\_\_\_\_Chamaedorea elegans/Parlor Palm

\_\_\_\_\_\_Chlorophytum comosum cv./Spider Plant

\_\_\_\_\_\_Chrysantheum morifolium or Dendranthema

 X grandiflora/Florist Chrysantheum

\_\_\_\_\_\_Chrysantheum X superbum/Shasta Daisy
\_\_\_\_\_\_Cissus rhombifollia “Mandaiana”/Grape Ivy

\_\_\_\_\_\_Clematis X jackmanii/Clematis Hybrids

\_\_\_\_\_\_Codiaeum variegatum var. pictum/Croton

\_\_\_\_\_\_Coleus X hybridus/Coleus

\_\_\_\_\_\_Cornus florida/Flowering Dogwood

\_\_\_\_\_\_Cornus kousa/Chinese Dogwood
\_\_\_\_\_\_Cotoneaster dammeri/Bearberry

\_\_\_\_\_\_X Cupressocyparis leylandii/Leyland Cypress

\_\_\_\_\_\_Crassula ovata/Jade Plant
\_\_\_\_\_\_Crocus sativus/Crocus
\_\_\_\_\_\_Cyclamen X persicum cv./Cyclamen
\_\_\_\_\_\_Dianthus caryophyllus cv./Carnation

\_\_\_\_\_\_Dieffenbachia maculata/Dumbcane

\_\_\_\_\_\_Dizygotheca elegantissima 'Castor/

 False Aralia

\_\_\_\_\_\_Dracaena cincta/Red Edge Dracaena

\_\_\_\_\_\_Dracaena deremensis 'Warneckii'/Warneckii Dracena
\_\_\_\_\_\_Dracaena fragens “Massangeana”/Corn Plant
\_\_\_\_\_\_Echeveria cv./Hens and Chickens

\_\_\_\_\_\_Echinaceae purpurea/ Cone Flower

\_\_\_\_\_\_Elaeagnus pungens/Thorny Elaeagnus

\_\_\_\_\_\_Epipremnum aureum cv./Golden Pothos
\_\_\_\_\_\_Eucalyptus polyanthemos/Silver Dollar Gum

\_\_\_\_\_\_Euonymus alata/Winged Euonymus

\_\_\_\_\_\_Euonymus japonica or 'Variegata'/

 Evergreen Euonymus

\_\_\_\_\_\_Euphorbia pulcherrima cv./Poinsettia

\_\_\_\_\_\_Ficus benjamina/Weeping or Benjamin Fig

 \_\_\_ \_\_\_\_\_\_Ficus elastica 'Decora'/Decora Rubber Plant

\_\_\_\_\_\_ \_\_\_\_\_\_Fittonia verschaffeltii/Nerve Plant

 \_\_\_ \_\_\_\_\_\_Forsythia X intermedia/Border Forsythia

 \_\_\_ \_\_\_\_\_\_Freesia x hybrid/Freesia
 \_\_\_\_\_\_Fuchsia X hybrida/Fuchsia

\_\_\_\_\_\_Gardenia jasminoides/Gardenia

\_\_\_\_\_\_Gerbera jamesonii/Gerber Daisy

\_\_\_\_\_\_Gibasis pellucida/Tahitian Bridal Veil

\_\_\_\_\_\_Ginkgo biloba/Ginkgo

\_\_\_\_\_\_Gladiolus X hortulanus/Gladiolus

\_\_\_\_\_\_Gleditsia tricanthos var. inermis/

 Thornless Honeylocust

\_\_\_\_\_\_Gynura aurantiaca/Velvet Plant
\_\_\_\_\_\_Gypsophila elegans cv./Babys Breath

\_\_\_\_\_\_Hedera helix/English ivy

\_\_\_\_\_\_Hemerocallis cv./Day Lily
\_\_\_\_\_\_Hibiscus sp./Hibiscus

\_\_\_\_\_\_Hippeastrum cv./Amaryllis

\_\_\_\_\_\_Hosta sp./Hosta

\_\_\_\_\_\_Hoya carnosa/Wax Plant

\_\_\_\_\_\_Hydrangea macrophylla/French Hydrangea

\_\_\_\_\_\_Iberis sempervirens/Evergreen Candytuft

\_\_\_\_\_\_llex X attenuata 'Fosteri'/Fosteri Holly

\_\_\_\_\_\_llex X attenuata 'Savannah'/Savannah Holly

\_\_\_\_\_\_Ilex crenata “Compacta”/Compacta Holly

\_\_\_\_\_\_ Ilex x “Nellie R. Stevens”/Nellie R. Stevens holly

\_\_\_\_\_\_Ilex crenata 'Helleri'/Helleri Holiy

\_\_\_\_\_\_Ilex cornuta “Carissa”/Carissa Holly

\_\_\_\_\_\_Ilex vomitoria 'Nana'/Dwarf Yaupon

\_\_\_\_\_\_Impatiens/lmpatiens Cultivars and Hybrids

\_\_\_\_\_\_Iris X germanica var florentina/Bearded Iris

 \_\_\_\_\_\_Iris xiphium/Dutch Iris

\_\_\_\_\_\_Juniperus conferta/Shore Juniper

\_\_\_\_\_\_Juniperus horizontalis 'Plumosa,’ ‘Bar Harbor,’

 or ‘Wiltonii’ /Creeping Juniper

\_\_\_\_\_\_Kalanchoe blossfeldiana/Kalanchoe

\_\_\_\_\_\_Lagerstroemia indica cv./Crape Myrtle
\_\_\_\_\_\_Lantana l./Lantana

\_\_\_\_\_\_Ligustrum japonicum cv./Japanese Privet
\_\_\_\_\_\_Limonium spp.

\_\_\_\_\_\_Liquidambar styraciflua/Sweetgum

\_\_\_\_\_\_Liriope muscari/Liriope(Green or Variegated cv.)

\_\_\_\_\_\_Loropetalum chinensis/Chinese fringe flower

\_\_\_\_\_\_Magnolia grandiflora/Southem Magnolia

\_\_\_\_\_\_Magnolia X soulangiana cv./

 Saucer Magnolia

\_\_\_\_\_\_Malus sp. or cv./Flowering Crabapple

\_\_\_\_\_\_Maranta leuconeura var.kerchoviana/

 Prayer Plant

\_\_\_\_\_\_Myrica cerifera/Wax Myrtle

\_\_\_\_\_\_Nandina domestica/Heavenly Bamboo

 Or Dwarf Nandina
\_\_\_\_\_\_Narcissus spp.

\_\_\_\_\_\_Nephrolepis exaltata cv./Boston Fem

\_\_\_\_\_\_Ophiopogon japonicus/Mondo Grass

\_\_\_\_\_\_Osmanthus sp.

\_\_\_\_\_\_Pachysandra terminalis/Japanese Pachysandra

\_\_\_\_\_\_Paeonia sp./Peony

\_\_\_\_\_\_Pelargonium X hortorum/Geranium

\_\_\_\_\_\_Pelargonium peltatum/Ivy Leaf Geranium

\_\_\_\_\_\_Pennisetum alopecuroides/Fountain Grass

\_\_\_\_\_\_Peperomia caperata 'Emerald Ripple'/

Emerald Ripple Peperomia

\_\_\_\_\_\_Peperomia obtusifolia/Peperomia

\_\_\_\_\_\_Petunia hybrida/Petunia

\_\_\_\_\_\_Phalaenopsis cv./ Phalaenopsis (Butterfly) Orchid

\_\_\_\_\_\_Philodendron scandens var. oxycardium/Parlor lvy

\_\_\_\_\_\_Picea abies/Norway Spruce

\_\_\_\_\_\_Pieris japonica/Japanese Andromeda

\_\_\_\_\_\_Pinus mugo var. mugo/Mugo Pine

\_\_\_\_\_\_Pinus strobus/Eastern White Pine

\_\_\_\_\_\_Platanus x acerifolia/London Plane Tree

\_\_\_\_\_\_Plectranthus australis/Swedish Ivy

\_\_\_\_\_\_Prunus laurocerasus 'Zabeliana'/Zabel Cherry

Laurel

\_\_\_\_\_\_Prunus serrulata 'Kwanzan'/Japanese

Flowering Cherry

\_\_\_\_\_\_Pyracantha coccinea/ Scarlet Firethorn

\_\_\_\_\_\_Pyrus calleryana 'Bradford'/Bradford Pear

\_\_\_\_\_\_Quercus falcata/Southern Red Oak

\_\_\_\_\_\_Quercus nigra/Water Oak

\_\_\_\_\_\_Quercus palustris/Pin Oak

\_\_\_\_\_\_Quercus phellos/Willow Oak

\_\_\_\_\_\_Raphiolepis indica/Indian Hawthorn

\_\_\_\_\_\_Rhododendron catawbiense/Catawba

 Hybrid Rhododendron

\_\_\_\_\_\_Rhododendron kiusianum or Rhododendron

 obtusum japonicum/Azalea
\_\_\_\_\_\_Rosa spp.

\_\_\_\_\_\_Rumohra adiantiformis/Leatherleaf Fern

\_\_\_\_\_\_Saintpaulia ionantha/African Violet

\_\_\_\_\_\_Salvia splendens/Salvia

\_\_\_\_\_\_Schefflera actinophylla/Schefflera

\_\_\_\_\_\_Schefflera arboricola/Dwarf Schefflera

\_\_\_\_\_\_Schlumbergera bridgesii/Christmas Cactus

\_\_\_\_\_\_Schlumbergera truncata/Thanksgiving cactus
\_\_\_\_\_\_Sedum spurium cv./Sedum

\_\_\_\_\_\_Spathiphyllum cvs./Peace Lily

\_\_\_\_\_\_Syngonium podophyllum/Nephthytis or

 Arrowhead Vine

\_\_\_\_\_\_Tagetes species/Marigold

\_\_\_\_\_\_Taxus cuspidata/Japanese Yew

\_\_\_\_\_\_Thuja occidentalis/American Arborvitae

\_\_\_\_\_\_Tradescantia zebrina/Purple Wandering Jew

\_\_\_\_\_\_Tsuga canadensis/Canadian Hemlock
\_\_\_\_\_\_Tulipa spp.

\_\_\_\_\_\_Verbena hybrida/ Garden Verbena

\_\_\_\_\_\_Viola X wittrockiana/Pansy

\_\_\_\_\_\_Zelkova serrata/Zelkova

\_\_\_\_\_\_Zinnia elegans/Zinnia

**NURSERY LANDSCAPE PRACTICUM**

**Contestant # \_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Contestant Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

|  |  |  |  |
| --- | --- | --- | --- |
| **Plant #** | **Measurement** | **Possible Points** | **Contestant Points** |
| **1** |  | **10** |  |
| **2** |  | **10** |  |
| **3** |  | **10** |  |
| **4** |  | **10** |  |
| **5** |  | **10** |  |

**Total Points \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**NOTE: When grading this scorecard, the contestant’s answer is correct if it is within + or – 1/8” on tress up to 1” in diameter and = or – ¼” on trees 1” to 3” in diameter.**