IOWA FFA NURSERY/LANDSCAPE CAREER DEVELOPMENT EVENT

PERSONNEL

Neal Van Veen, DMACC, Ankeny, Horticulture ..... CDE Coordinator
Brad Taylor, Story City ..... CDE Chairperson

EVENT OBJECTIVES

The Iowa FFA Nursery and Landscape CDE includes all aspects of the industry in producing, marketing, utilizing, and maintaining landscape plants (woody and herbaceous plants and turf grasses), plus related products, equipment and services including landscape design.

The purpose is to stimulate career interest, encourage proficiency development and recognize excellence in students of nursery practices and landscaping through the Agricultural Education curriculum.

1. PLANT MATERIALS – to demonstrate the ability to identify nursery and landscape plant materials and turf grasses commonly used in Iowa.
2. PLANT DISORDERS – to demonstrate the ability to identify unhealthy plant conditions due to pests, nutritional or physiological disorders, and mechanical or chemical injuries.
3. CULTURAL PRACTICES – to demonstrate knowledge of the principles and skills involved in propagation, growth requirements, growing techniques, harvesting, marketing and maintenance of nursery plants and landscape turf.
4. DESIGN AND CONSTRUCTION - to demonstrate knowledge of the principles and techniques of landscape design and construction.
5. SUPPLIES AND EQUIPMENT – to demonstrate the ability to identify, select, use and maintain appropriate supplies and equipment for nursery and landscape operations, including equipment and procedures in mechanization and automation.
6. SAFETY- to demonstrate knowledge of safety practices in nursery/landscape operations.
7. INTERPERSONAL RELATIONS – to demonstrate skill in oral and written business communication.
8. MARKETING - to understand marketing principles and demonstrate proper sales and service skills.
9. RECORDS AND REPORTS – to demonstrate the ability to prepare accurate and legible records and reports; and to interpret business documents.

GENERAL RULES

1. Each chapter may enter a team composed of three or four members, with the three highest scores counting for the team's total score. Team members must all be members of the same chapter.
2. Each participant will participate in all phases of the event.
3. Under no circumstances will any participant be allowed to touch or handle in any way any specimen in any phase of the event. Any infraction of this policy will be sufficient cause to eliminate the team from the event.

4. No team members or advisors are to observe materials in the horticulture greenhouse at the event site during the three weeks prior to the event.
5. Participants shall report to the chair of the event at the event site between 8:15 a.m. and 8:45 a.m. on event day.
6. Answer sheets and other written materials will be furnished for each event phase.
7. Participants are to furnish all measuring instruments for the problem-solving phases. All participants are to bring their own equipment; including pencils, tape measures, rules, etc.
8. All plant materials will be furnished for the event.
9. A special effort will be made not to use questions or establish situations which might be termed as controversial. In developing the event, special efforts will be made to use materials which are generally accepted nationwide.
10. Exhibits will be left out following the event for viewing and photographing by FFA chapter advisors and others.

EVENT ACTIVITIES

1. Seven types of activities will be completed during the event in each section. These include:
   (a) General Knowledge Questions (30 minutes)
   (b) Landscape Drawing Practicum (30 minutes)
   (c) Nursery Problem-Solving (20 minutes)
   (d) Identification of Plant Materials (20 minutes)
   (e) Selection Classes (20 minutes)
   (f) Plant Disorder Practicum (20 minutes)
   (g) Assessment and Solution of Nursery/Landscape Problems (20 minutes)

2. Each participant will participate in all phases of the event. A team must consist of at least 3 members to be eligible for Champion Team Honors. Each participant will work on an individual basis throughout the event.

Phase I – General Knowledge Questions (125 points)

Twenty-five (25) objective multiple choice type questions will be selected from the areas listed below. Each participant will be allowed 30 minutes to complete this phase. Each answer will have a value of 5 points. This phase of the event will test the participant's knowledge and understanding of the basic principles relating to the following areas of horticulture: Career Opportunities, Judging Flowers and Ornamental Plants, Customer Relations and Sales, The Nursery Industry, Production of Nursery Stock, Landscape Design, Turf Grass Maintenance, and Landscape Maintenance.

Answers to all test questions will be found in one reference: Introductory Horticulture, 3rd Edition, Reily and Shry, Delmar Publishers Inc., 2 Computer Drive, West, Box 15015, Albany, New York 12212-5015.

Phase II – Landscape Drawing Practicum (100 points)

Participants will be furnished with a landscape drawing and scratch paper. The student will be asked to solve 10 problems related to or about the existing drawing. Landscape problems may include but will not be limited to determining the cost of fencing, the cost of bricks for a patio, or the number of yards of sod needed to cover the front yard, appropriateness of landscape features and plant materials. Plant materials will be limited to those plants listed for Phase IV, Identification of Plant Materials

(Form 14). Students should furnish a scale capable of measurement to 1/8 inch and a battery operated electronic calculator. Each problem is worth 10 points. Three minutes will be allowed for each problem with a total of 30 minutes for this phase.

Phase III – Nursery Problem-Solving (50 points)

Participants will be asked to solve five problems related to nursery production or sales of retail products. Nursery problems may included, but will not be limited to, propagation and culture of nursery plants, calculation of the amount of pesticide needed to treat a given area, amount of fertilizer a customer needs to fertilize a lawn, or determine the amount of soil needed to fill 2,500 1-gallon containers. Students should furnish a battery operated electronic calculator. Each problem is worth 10 points. Four minutes will be allowed for each problem with a total of 20 minutes for this phase.

Phase IV – Identification of Plant Materials (125 points)

Twenty-five (25) specimens from Form 14 will be displayed for participants to identify by their common names. Each specimen will be designated by a number. Write the appropriate number in the space adjacent to the specimen's name on the official score card. Five points will be given for each specimen that is correctly identified. Each participant will be allowed 20 minutes to complete this phase or approximately 48 seconds for each specimen station.

No plants may be touched or handled in any way.

Live branches with foliage will be used.

Phase V – Selection Classes (200 points)

This phase will include the selection of four classes of nursery products outlined below. Each of the four classes will include ten numbered items of which the five most uniform specimens are to be chosen for use in the landscape site. Participants will place the numbers of the plants they have selected on an answer sheet. Ten points will be awarded for each correctly selected specimen. The selection section will be scored on a declining basis, instead of points only for correct plants. For example, plant #2 is not one of the most uniform plants, a student who selects this plant may receive 7 points since it is close to the correct group, instead of receiving 0 points for selecting an incorrect plant. Five minutes will be allowed to complete the selection of each of the four classes: hence, 20 minutes will be allowed to complete this total phase. No plants my be touched or handled in any way.

1. The four classes of nursery plants to be selected will be from the following lists of plants with (1) one class of deciduous shade and flowering trees; (2) one class of needle leaved evergreens; (3) one class of deciduous shrubs; and (4) one class of ground covers.

   Deciduous Shade and Flowering Trees (May be bare root, balled and burlapped, or container grown.)

   Needle Leaved Evergreens (May be balled and burlapped or container grown.)

   Deciduous Shrubs (May be bare root, balled and burlapped, or container grown.)

   Ground Covers (Will be container grown.)

2. These items may be used to determine placing of specimens in a class: size, form, density, color, blemish free.

   Description of items:
   - Size--Neither too small nor excessively large for species.
   - Form--Plant shape should be typical of commercial product of the species indicated, and should be symmetrical.
   - Density--Shrub should not have loose, open, or irregular appearance. Most deciduous plants tend to have a more open habit than evergreens.
   - Color—Foliage color typical of health specimen of the cultivar.
   - Blemish-free—Free of insect, disease, chemical, or physical damage.

Phase VI – Identifying and Controlling Plant Disorders Practicum (50 points)

The participant will assume the role of an employee in a retail garden center. An event official will assume the role of a customer requesting information about identification and treatment of a common ornamental plant disorder. The problem may be due to an insect, disease, or weed; or it may be physiological. The inquiry may be over the phone or face-to-face. A sample of the affected plant may be presented, or the disorder may be verbally described in response to questions by the participant. Each participant will be furnished with a set of specimen labels for common retail-packaged garden chemicals. There will be five plant disorder stations with two questions asked about each disorder; each question will be work 5 points. Participants will have a time limit of four minutes per station; 20 minutes will be allowed for completion of this practicum. Plant disorders will be selected from the following list:

Diseases	Insects	Weeds	Other
Anthracnose	Aphid	Broadleaf Plantain	Frost/Freeze Injury
Apple Scab	Bagworm	Buckhorn Plantain	Iron Deficiency Chlorosis
Canker	Leaf Galls	Crabgrass	Nitrogen Deficiency
Cedar Apple Rust	Leaf Miners	Creeping Charlie	2,4-D Damage
Crown Gall	Scale	Dandelion	Urine Damage
Fireblight	Tent Caterpillar	Goosegrass	
Leaf Spot	Trunk Borer	Oxalis	
Powdery Mildew	Whitefly	Pigweed	
	White Grub	Purslane	

Phase VII – Assessment and Solution of Nursery/Landscape Problems (50 points)

This practicum is designed to evaluate participants knowledge of and ability in 1) assessing the request or problem presented; 2) reviewing alternate procedures or courses of action based on individual knowledge or reference information provided; and 3) deciding on a solution. The participant may be asked to assess situations in any of the following areas: 1) measuring nursery stock; 2) pruning nursery stock; 3) equipment maintenance; and 4) other problem-solving situations of nursery and landscape plants, supplies or practices. There will be 10 situations presented from the four areas previously listed, and each correct answer has a value of 5 points. Participants are allowed 20 minutes to

complete this phase. Equipment and supplies may come from the National Identification List. Participants must supply their own equipment.

REFERENCES

1. Introductory Horticulture, 3rd Edition, Reiley and Shry, Delmar Publishers Inc., 2 Computer Drive, West, Box 15015, Albany, New York 12212-5015.
2. National FFA Career Development Events – 2001-2005 (National FFA Organization rules).
3. American Standard for Nursery Stock, American Association of Nurserymen, Inc., 1250 I Street, NE, Suite 500, Washington, D.C. 20005, 1990.

SCORING AND RANKING OF TEAMS AND PARTICIPANTS

1. Individual scores will be the sum of the scores on the seven phases of the event:

Phases	**Scoring**
General Knowledge Questions	125 points
Landscape Drawing Practicum	100 points
Nursery Problem-Solving	50 points
Identification of Plant Materials	125 points
Selection Classes	200 points
Identifying and Controlling Plant Disorders Practicum	50 points
Assessment and Solution of Nursery/Landscape Problems	50 points
Total Individual Points	700 points
Total Team Points Possible (3 participants)	**2100 points**

2. Team scores will be the sum of the scores of the top three (3) team members. The total of the possible points is 2100.
3. To determine the individual and team winners, the participant will be ranked on the basis of the total score for all seven (7) activity areas.
4. If there is a tie in the total point score of an individual or team, it shall be broken: (a) first by score on the Landscape Drawing Practicum; (b) second on the total score for General Knowledge Questions; and (c) third on the total score for judging classes.
5. Teams will be ranked into groups: "Gold," "Silver," or "Bronze." Teams which do not have three members will be listed as "Participants." Teams which violate any rule will also receive a "Participation" rating.
6. The team winner over all areas will be designated the "Iowa Champion FFA Nursery/Landscape Team" and will represent Iowa in the National FFA Nursery/Landscape Career Development Event in Louisville in October.

AWARDS

Awards listed below are at the discretion of the sponsor and pending availability of sponsorship. It is vitally important that participants write thank you letters to sponsors in order to retain their support. A thank you list naming current sponsors will be provided to each participating chapter at the event site.

Award sponsored through the National FFA Foundation:

Champion Team..... Plaque

Awards sponsored through the Iowa FFA Foundation:

Champion Team.. Cash award for travel to the National FFA Nursery/Landscape CDE
Reserve Champion Team..... Plaque
Top 10 Teams ..... Rosettes
Member of Top 10 Teams ..... Rosettes
Top 10 Individuals..... Rosettes
1st and 2nd Place Individuals..... Trophies
Top Team and Top Individual ..... Trophies

a. Identification of Plant Materials
b. Selection Classes
c. Nursery Problem-Solving
d. Plant Disorder Practicum
e. Landscape Drawing Practicum
f. General Knowledge
g. Assessment and solution of Nursery/Landscape Problems

The Iowa FFA Association will award certificates to all Nursery/Landscape teams and participants.

NURSERY/LANDSCAPE IDENTIFICATION

FORM 14

Participant Name: _____ Participant Number:_____

No. COMMON NAME/TECHNICAL NAME

_____ - White Fir/Aibes concolor
_____ - Amur Maple/Acer ginnala
_____ - Japanese Maple/Acer palmatum cv.
_____ - Norway Maple/Acerrubrum cv.
_____ - Carpet Bugle/Ajuga reptans cv.
_____ - Service Berry/Amelanchier Arborea
_____ - Japanese Barberry/Berberis thunbergii
_____ - River Birch/Betula nigra
_____ - Korean Box/Buxus microphylla
_____ - Redbud/Cercis canadensis
_____ - Japanese (Flowering) Quince/Chaenomeles speciosa cv.
_____ - Shasta Daisy/Chrysanthemum x superbum cv.
_____ - Redstem Dogwood/Cornus spp.
_____ - Spreading Cotoneaster/Cotoneaster divaricatus
_____ - Washington Hawthorn/Crateagus phaenopyrum
_____ - Russian Olive/Elaeagnus angustifolia
_____ - Winged Euonymus/Euonymus alatus
_____ - Wintercreeper/Euonymus Fortunei cv.
_____ - Border Forsythia/Forsythia x intermedia cv.
_____ - White ash/Fraxinum americianca cv.
_____ - Ginkgo, Maidenhair Tree/Ginkgo biloba
_____ - Thornless Honeylocust/Gleditsia tricanthos inermis cv.
_____ - English Ivy/Herdera helix cv.
_____ - Day Lily/Hemerocallis spp. and cv.
_____ - Hosta/Hosta x hybrida cv.
_____ - Meserve Holly/ilex x Meserveae cv.
_____ - Viburnum
_____ - Creeping Juniper/Juniperus horizontalis cv.
_____ - Chinese (Saucer) Magnolia/Magnolia x Soulangiana cv.
_____ - Oregon Grape/Mahonia Aquifoli cv.
_____ - Flowering Crabapple/Malus spp. and cv.
_____ - Maiden Grass/Miscanthus sinensis
_____ - Japanese Pachysandra/Pachysandra terminalis
_____ - Peony/Paeonia hybrid cv.
_____ - Boston Ivy/Parthenocissus tricuspidata
_____ - Norway Spruce/Picea abies
_____ - Colorado Blue Spruce/Picea pungens cv.
_____ - Mugo Pine/Pinus Mugo
_____ - Austrian Pine/Pinus nigra
_____ - Eastern White Pine/Pinus strobus
_____ - Potentilla/Potentilla fruticosa cv.
_____ - Callery Pear/Pyrus Calleryana
_____ - Pin Oak/Quercus palustris
_____ - Red Oak/Quercus rubra
_____ - PJM Rhododendron/Rhododendron x PJM
_____ - Hybrid Tea Rose/Rosa spp. Class Hybrid Tea cv.
_____ - European Mountain Ash/Sorbus Aucuparia
_____ - Spirea/Spiraea x Bumalda cv.
_____ - Common Lilac/Cyringa vulgaris cv.
_____ - Japanese Yew/Taxus cuspidata cv.
_____ - American Arborvitae/Thuja occidentalis cv.
_____ - Littleleaf Linden/Tilia cordata
_____ - Canada Hemlock/Tsuga canadensis
_____ - American Elm/Ulmus americana cv.
_____ - Periwinkle Vinca/Vinca minor cv.
_____ - Adam's Needle/Yucca filamentosa