

# Nursery and Landscape

A Special Project of the South Dakota FFA Foundation

**Important Note:** Please thoroughly read the General Rules at the beginning of this handbook for complete rules and procedures that are relevant to all South Dakota FFA Career Development Events.

## Purpose

The purpose of the Nursery and Landscape Career Development Event is to promote career interest, encourage proficiency development, and recognize excellence in individuals through this event which includes all aspects of the nursery and landscape industry.

## Objectives

- To apply nursery and landscape principles and practices as they impact residential, commercial, public, and recreational applications.
- To demonstrate the ability to identify, select, and utilize nursery and landscape plants (interior/exterior), landscape materials, and turf grasses commonly used in the United States.
- To demonstrate the ability to identify unhealthy plant conditions due to pests, nutritional/physiological disorders and mechanical/chemical injury.
- To demonstrate knowledge of the principles and skills involved in propagation, growth requirements, growing techniques, harvesting, sustainability, marketing, and maintenance of interior and exterior landscape plants and turf grasses.
- To demonstrate knowledge of the principles and techniques of landscape design and construction.
- 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.
- To demonstrate knowledge of safety practices in nursery and landscape operations.

## Event Rules

Each team will be comprised of three or four members.

The top three individual scores will be used to determine the final team score.

## Event Format

The Nursery and Landscape CDE will consist of four (4) phases: identification of plant materials, identification of equipment and supplies, a practicum, and a general knowledge examination.

### Identification of Plant Materials – 250 points

Fifty (50) specimens will be displayed for participants to identify by their common names and Latin names.

Each specimen will be designated by a number. The appropriate number should be written in the space adjacent to the specimen's name on the identification form.

Five (5) points will be given for each specimen that is correctly identified.

Each participant will be allowed forty (40) minutes to complete this phase.

In the CDE, most of the plant material will be dormant, but living plants or plant parts will be used for those plants customarily grown indoors in South Dakota.

No specimen may be touched or handled in any way. Any infraction of this policy will be cause to eliminate the entire team from the CDE.

### Identification of Equipment and Supplies – 250 points

Participants will identify fifty (50) items selected from the provided list.

Items may be presented as an intact specimen, photograph, or representative line drawing.

The appropriate number should be written in the space adjacent to the specimen's name on the identification form.

Five (5) points will be given for each specimen that is correctly identified.

Each participant will be allowed forty (40) minutes to complete this phase.

### Practicum – 200 points

The participant will be furnished with a landscape drawing and twenty (20) multiple-choice questions about the landscape drawing, such as:

- determine the cost of fencing
- cost of patio
- or number of yards of sod required.

Each answer has a value of ten (10) points.

The participant should furnish a ruler and a battery-operated calculator (if desired).

Forty (40) minutes will be allowed for this phase of the CDE.

### General Knowledge Examination – 300 points

Fifty (50) objective multiple-choice questions will be selected from the areas listed below.

Each participant will be allowed forty (40) minutes to complete this phase.

Each answer has a value of six (6) points.

This phase of the CDE will test the participant's knowledge and understanding of the basic principles relating to the following areas of horticulture:

- Plant Materials
- Planting or Growing Media
- Diagnosis of Plant Disorders
- Materials such as Growth Regulators, Fertilizers, etc.
- Propagation
- Safety
- Cultural Instruction
- Landscape Design

## Scoring

	Points Possible
Identification of Plant Materials	250
Identification of Equipment and Supplies	250
Practicum	200
General Knowledge Examination	300
<b>Total Possible Individual Score</b>	<b>1000</b>
<b>Total Possible Team Score (3 participants)</b>	<b>3000</b>

## Tiebreakers

In the case of a team tie, the order to break the tie will be:

1. Total written exam score
2. Total identification score
3. Total practicum score

In the case of an individual tie, the order to break the tie will be:

1. Written exam score
2. Total identification score
3. Practicum score

## References

- A. *Introductory Horticulture*, Shry & Reily, Delmar Publishers.
- B. *Landscaping Principles and Practices*, Engles, Delmar Publishers.
- C. National FFA Core Catalog – Past CDE Materials (<http://shop.ffa.org/cde-materials-c1289.aspx>)

## Nursery and Landscape Identification Form

Plant List		
001. Amur Maple	018. European Mountain Ash	035. Ponderosa Pine
002. Arrow Wood	019. Flowering Crab	036. Quaking Aspen
003. Austrian Pine	020. Fragrant Sumac	037. Red Dogwood
004. Black Hills Spruce (White Spruce)	021. Ginkgo	038. Red Maple
005. Blue Rug Juniper	022. Green Ash	039. Red Oak
006. Boston Ivy	023. Heartleaf Philodendron	040. Russian Olive
007. Bridal Wreath Spirea	024. Hedge Cotoneaster	041. Scheffelaria
008. Buckeye Tree	025. Hybrid Forsythia	042. Scotch (or Scots) Pine
009. Burr Oak	026. Hybrid Tea Rose	043. Shrubby Cinquefoil
010. Chinese Juniper	027. Japanese Barberry	044. Spotted Dumbcane
011. Chinese Elm	028. Japanese Yew	045. Staghorn Sumac
012. Colorado Blue Spruce	029. Korean Boxwood	046. Sugar Maple
013. Common Lilac	030. Littleleaf Linden	047. Thornless Honey Locust
014. Cranberry Bush	031. Mugo Pine	048. White Fir
015. Decora Rubber Plant	032. Norway Maple	049. Winged Euonymus
016. Eastern Arborvitae	033. Paper Birch	050. Wintercreeper
017. Eastern White Pine	034. Peegee Hydrangea	
Equipment and Supply List		
260. Anvil-and-blade-pruner	288. Hoe	316. Propagation mat
261. Ball card (B&B truck)	289. Hook-and-blade pruners	317. Pruning saw
262. Bark mulch	290. Hose-end repair fitting	318. Quick coupler
263. Bow saw	291. Hose-end sprayer	319. Quick coupler head adapter
264. Broadcast (cyclone spreader)	292. Hose-end washer	320. Reel mower
265. Bubbler head, irrigation	293. Hose repair coupling	321. Resin-coated fertilizer
266. Bulb planter	294. Impact sprinkler	322. Rotary mower
267. Bunker rake	295. Irrigation ring tool	323. Rototiller
268. Burlap	296. Landscape fabric	324. Round point shovel
269. Compressed air sprayer	297. Leaf rake	325. Scoop shovel
270. Core aerifier	298. Loppers	326. Shade fabric
271. Chain saw	299. Mattock	327. Sharpening stone
272. Cut-off machine	300. Measuring wheel	328. Siphon proportioner
273. Drip emitter, irrigation	301. Mist nozzle (mist bed)	329. Soaker hose
274. Dry-lock wall block	302. Mower blade balancer	330. Soil sampling tube
275. Edger (power or hand)	303. Nursery container	331. Solenoid valve
276. Edging	304. Oscillating sprinkler	332. Spade
277. Erosion netting	305. Peat moss	333. Sphagnum moss
278. Fertilizer injector	306. Pick axe	334. Square point (flat) shovel
279. Fertilizer tablet	307. Planting/earth/soil auger	335. String trimmer
280. Garden (spading) fork	308. Pole pruner	336. Thatch rake
281. Garden (bow) rake	309. Polyethylene pipe	337. Tree caliper
282. Grafting band	310. Pop-up irrigation head	338. tree wrap
283. Grafting knife	311. Post-hole digger	339. Trowel
284. Granular fertilizer	312. Power blower	340. Vertical Mower
285. Gravity (drop) spreader	313. Power hedge trimmer	341. Water breaker
286. Ground/pelleted limestone	314. Pot-in-pot units	342. Wire tree basket
287. Hedge shears	315. Pump sprayer	