PLANT IDENTIFICATION
3 or 4 Member Teams

I. PURPOSE

This event helps students develop an interest in a wide variety of plants that are important habitat components for wildlife and domestic livestock. This program is taught in the agriculture curriculum to help enhance the higher thinking skills of its participants. The Plant Identification CDE and its supporting instruction helps students recognize a significant number of specific plants and their fundamental growth characteristics as well as understand the importance of plants as a component of the environment in which animals exist. This event provides opportunity for mastery of the foundational knowledge and understanding contributing to future learning and success in college level coursework related to plant identification, understanding of growth parameters, and economic importance of plants.

II. EVENT FORMAT

A. Team Make-up

Three or four individuals per school form a team. All members will be scored and the top three scores will count towards the team total.

B. Equipment

Team members must provide their own compliant clipboard and/or clean folder with the following items: scan sheet, and/or copy of the scan sheet, optional Texas FFA CDE drop sheet, and/or 2 sheets of lined or unlined blank paper.

C. Event Format

1. The event shall consist of 60 samples of grasses, grass-like, forbs, legumes, and woody plants selected from the Master Plant List for Texas Plant Identification Contest. .
2. The participant will identify each plant and for each indicate (1) longevity, (2) season of growth, (3) origin, and (4) the economic values of wildlife and grazing.
3. All grass samples will have inflorescence present. Identification of all plants should be based on botanical characteristics.
4. The Master Plant List for Texas Plant Identification Contest is the official list for this event.
5. Improper identification will nullify all points concerning a given sample.
6. A list of common names associated with a “Plant Number” will be provided to each individual. Individuals will use the “Plant Number” to identify plants on the scoring sheets. For example, Bitter sneezeweed is “Plant Number” 078.
7. Plants with dual characteristics should have both correctly marked. For example: Ash juniper is listed as both a warm and cool season plant and the “BOTH” answer option should be marked to earn full credit. In the event, the only characteristics to be marked are those given on the attached plant list.
8. Materials used in the event will be mounted or live specimens. Contestants will not be allowed to handle specimens.
9. The Master Plant List for Texas Plant Identification Contest will be the official score card for grading the contestant’s scan sheet paper and should be followed during the training period.
10. Plant specimens will be identified in six rotations, 10 plants will be used in each rotation, with 12 minutes to complete each rotation. All contestants will be allowed to work within the rotation at their own pace. Contestants cannot return to a rotation once it is timed out.

III. SCORING

Scoring for each specimen will be as follows:	
Correct Identification	5 points
Characteristics	1 point each (6 total)
TOTAL INDIVIDUAL POINTS	**660**
TOTAL TEAM POINTS	**1,980**

IV. TIEBREAKERS

If two or more teams have the same total score,

1. The team with the highest score on plant identification will win, if still tied;
2. The team with the highest score on plant characteristics will win, if still tied;
3. The team with the highest alternate score will win, if still tied;
4. Teams will be accompanied by their advisor and will meet with contest officials who will conduct a coin toss to determine the higher placing team.

If two or more individuals have the same total score,

1. The contestant with the highest score on plant identification will win.
2. The contestant with the highest score on plant characteristics will win, if still tied;
3. If still tied, the contestants will be accompanied by their advisor and will meet with contest officials who will conduct a coin toss to determine the higher placing individual.

V. References

PLANT ID LISTS CAN NOW BE FOUND AT THE FOLLOWING LINK:
http://www.judgingcard.com/resources/List.aspx

A. General:

S.L. Hatch and J. Pluhar. 1993. Texas Range Plants. Texas A&M University Press.
Stubbendieck, J., S. L. Hatch, and C.H. Butterfield. 1997. North American Range Plants. 5th ed. University of Nebraska Press.

B. Photographic Books:

Ajilvsgi, G. 1984. Wildflowers of Texas. Shearer Publ. Enquist, M. 1987. Wildflowers of the Texas Hill County. Lone Star Botanical. Loughmiller, C. and L. Loughmiller. 1989. Texas Wildlflowers, A Field Guide. Univ. of Texas Press.

Warnock, B.H. 1974. Wildflowers of the Guadalupe Mountains and the Sand Dune Country, Texas. Sul Ross State University.

Warnock, B.H. 1977. Wildflowers of the Davis Mountains and the Marathon Basin. Sul Ross State University.

Whitson, T. and other. 1992. Weeds of the West. Pioneer of Jackson Hole.

C. Technical Publications:

Correll, D.J. and M.C. Johnston. 1979. Manual of the Vascular Plants of Texas. University of Texas.

Gould, F.W. 1951. Grasses of the Southwestern United States. The University of Arizona Press.

Gould, F.W. 1978. Common Texas Grasses, an illustrated guide. Texas A&M University Press.

Hitchcock, A.S. 1971. Manual of the Grasses of the United States (2nd ed., Agnes Chase). Dover Publ. (2nd volumes)

Powell, A. M. 1994. Grasses of the Trans-Pecos and Adjacent Areas. University of Texas Press.

Powell, A.M. 1988. Trees and Shrubs of Trans-Pecos Texas. Big Bend Natural History Association

EXPLANATION OF CHARACTERISTICS

GRASS - A member of a large, world-wide family of annual or perennial plants distinguished by round or flattened stems, solid at the nodes and 2-ranked, alternate, parallel-veined leaves composed of a split sheath and blade. The flowered unit is the spikelet composed of one or more florets.

FORB - Any herb other than a grass.

LEGUME - Herbs or woody plants with usually showy bonnet-like or butterfly-shaped flowers, alternate mostly compound leaves with stipules, and a simple pod bearing one or several seeds in one row.

WOODY PLANT - Containing tissues such as are present in true wood. Some plants are woody only near the base.

ANNUAL - Living less than one year. Such plants must grow from seeds each year.

PERENNIAL - Lasting more than a year. Producing leaves and stems each year from rootstocks, crown buds or branches.

COOL - Making all or most of the growth in the fall, winter, and spring.

WARM SEASON - Making most of the growth in the frost-free months of spring, summer and fall.

ECONOMIC VALUES - The desirability and ranking of a plant for reseeding, wildlife and grazing use in range and pasture management.

NATIVE - Native to the North American continent.

INTRODUCED - Not native to North America. It may be desirable or undesirable for use.

WILDLIFE VALUES - Are based on palatability of the plants to wildlife of an economic importance--deer, antelope, turkey, quail and dove. The plants were rated from the standpoint of food only. A plant may be rated "good" for quail and be "poor" or worthless for deer and antelope. The highest rating for the plant was selected as the economic wildlife value.

> Good - Highly palatable to one or more of the classes of wildlife. Fair - The plant is commonly used by one or more of the classes of wildlife. Poor-The plant is seldom used as food.

GRAZING VALUES - The worth of a plant for livestock, determined by considering its palatability, nutritive quality, and volume of forage produced. It must be considered in relation to the climate and soil and its adaptation and proper use. For example:

> Buffalograss is GOOD value on a clay loam soil in a 20-inch rainfall area, but on the same soils in a 35-inch rainfall belt it produces less than half the forage of big bluestem, little bluestem and Indiangrass and, therefore, in the higher rainfall area would not have more than a FAIR value. Grazing value is a comparative value, but it is not intended to compare plants

from irrigated or improved pasture (where fertilizers and legumes are used) with plants of native ranges (where fertility is maintained by natural means).

GOOD GRAZING - A term applied to a plant that is in high volume production, highly palatable (not necessarily at all seasons), and nutritious, where it is adapted.

FAIR GRAZING - The plant is not as good as the better plants in volume production, palatability, and quality in an area where it is adapted.

POOR GRAZING - The plant rates the lowest in one of more basic requirements, in most areas where it is found.

POISON - A plant that has a toxic substance at different stages growth that will cause sickness or death to livestock. At other times during the growth stage the plant may be considered good for grazing.