

FORESTRY

STATE FAIR ENTRIES:
Premier 4-H Science Award is available in this area.

FORESTRY GUIDELINES

- The official reference for all forestry projects is The Tree Identification Manual 4-H 332 which was recently revised and is available for purchase from UNL Marketplace. Other helpful forestry references include The Trees of Nebraska (EC 92-1774-X), Leafing Out (4-H431), and Plant a Tree (EC 17-11-80).
- Display "boards" must be made from wood or wood composite, e.g. plywood, fiberboard, or Masonite, ¼" to ½" thick and no larger than 24" x 24". Display boards may be coated, e.g., painted or varnished, on both sides to prevent warping.
- Display "posters" must be made from a material, e.g. foam board or poster board that will stand upright without buckling, and be no larger than 24" x 24".
- Repeat exhibitors must use new displays—each display may only be used once.
- Display "books" must measure no more than 16" x 16".
- At least 5 of the 10 samples in Class 2, 3, 4, and 6 must be from the list of 60 species described in 4-H 332. Samples must be from 10 different tree species. For example, Emerald Queen Maple and Crimson King Maple are both varieties of the same species (Norway Maple), and thus have the same genus and species name, i.e., *Acer platanoides*. All samples must be from trees, NO shrubs. If more than 10 samples are included in the display, only the first 10 samples from the current year will be judged.
- Remember that other general labeling standards apply, for example, scientific names are always italicized or underlined. Also, the first letter of a Genus name is always capitalized. The first letter of a species name is always lower case. When required, always indicate complete scientific names (Genus and species) and common names, (e.g. Norway Maple) even when "variety names" are included. For example, the scientific name of Emerald Queen Maple is *Acer platanoides* and the common name is Norway maple. "Emerald Queen" may be included as the variety name, but variety names are not required.
- How well the exhibitor follows written directions is an important factor in judging.

DEPT. D / DIV. 320 FORESTRY

- Class 1 Design Your Own Exhibit— Prepare an educational exhibit about some aspect of trees, forests, or forestry that is of special interest to you. Possible topics include paper recycling, wild fire, forest products, forest wildlife, or forest pest. The only requirement is that the display must be no larger than 24 inches by 24 inches. Photographs, drawings, samples, charts, posters, etc. can be used, but include substantially different from other display classes. Be as creative as you like.
- Class 2 Leaf Display—The leaf display must include samples of "complete leaves" from at least 10 different tree species. The display must include at least two samples of simple leaves, compound leaves, and conifer leaves. Leaves should be pressed, dried and mounted.
- **Leaf Collection:** Whenever possible, collect leaves from mature trees. Collect leaves any time after they have reached full size, usually beginning in early summer. The leaf sample should be in good condition and representative of the average leaves on the tree. Keep in mind that shaded leaves are often much larger than normal. Carefully remove leaves from the twig with the entire petiole or rachis intact. After collection, fresh leaf samples can be temporarily stored within the pages of an old magazine, but they should be properly pressed and dried for display. Be sure to record pertinent information during collection.

- **Mounting:** Leaves may be displayed in a notebook or on a display board. Any method may be used to mount leaves, for example, wire, glue, tape, staples, plastic bags but be sure all their features can be clearly identified.
- **Labeling:** The label for each sample must include:
 - 1) Common name
 - 2) Scientific name
 - 3) Leaf type
 - 4) Leaf arrangement (for broadleaf trees)
 - 5) Leaf composition (for broadleaf trees)
 - 6) Exhibitor's name
 - 7) Collection date
 - 8) Collection location (be specific, state and county at a minimum)

- If a twig is included with a sample, indicate "twig included" on the label. For example, the twig may be included with an eastern cedar sample because the leaves are very small and difficult to remove from the twig.
- Supplemental information, for example, general uses, common products, fall color, etc., may be included with the display to enhance its educational value.

Class 3 Twig Display - The twig display must include twig samples from at least 10 different tree species. The display must include at least two samples of opposite and alternate leaf arrangements from broadleaf trees.

- **Collection:** Twig samples should be collected during the dormant season. (November – April) when the buds are mature. Twig samples must be at least 6 inches long and exhibit buds. Leaves must be removed and side branches must be trimmed to less than 1 inch in length.
- **Mounting:** Twigs must be mounted on a display board. Any method (e.g. wire, glue, tape, staples, plastic bags, etc.) may be used to mount twigs, but be sure all their features can be clearly identified. The non-terminal ends must be cut at a slant so the pith can be seen.
- **Labeling:** The label for each sample must include:
 - 1) Common name
 - 2) Scientific name
 - 3) Leaf arrangement (for broadleaf trees)
 - 4) Exhibitor's name
 - 5) Collection date
 - 6) Collection location (be specific, state and county at a minimum)
- Supplemental information, for example, general uses, tree characteristics, etc., may be included with the display to enhance its educational value.

Class 4 Seed and Fruit Display— The seed display must include seed samples from at least 10 different tree species.

- **Collection:** Tree seeds should be collected at the time of year when they mature, which varies widely depending upon tree species. For example, Silver maple seeds mature in May while red oak acorns do not mature until September. Seed samples should be free of insect or disease symptoms. Remember to display the seeds not fruit. For example, the seed of honeylocust is enclosed in a pod. Remove and display the seed not just the pod. It is acceptable to display the fruit with the seed, but clearly label each.
- **Mounting:** Seeds may be displayed in a variety of ways. E.g. mounted on a display board, displayed in jars in a rack, etc., but they must be securely mounted and easily viewed. Be as creative as you like.
- **Labeling:** The labels for each sample must include:
 - 1) Common name
 - 2) Scientific name
 - 3) Type of fruit, if known (e.g. -samara, pod, nut, legume, etc)
 - 4) Exhibitor's name
 - 5) Collection date
 - 6) Collection location (be specific, state and county at a minimum)
- Supplemental information, for example, maturity date, average number of seed in the fruit, etc., may be included with the display to enhance educational value.