

4-H Forestry Project

Decide which fair class you are going to compete in by looking at the forestry department in the fair book. Our rules are the same as the state fair.

Selecting Leaves

Collect leaves early summer to avoid defects – leaves collected mid-summer might be drier and easier to press but there is an increased risk of leaf imperfections later in summer.

- Choose leaves that are relatively flat, not curled.
- Look for leaves that are not spotted or bumpy.
- Do not be afraid to pick leaves in various stages of changing colors (fall) but be sure to choose a mature leaf.
- It is recommended to take a small twig that contains at least two leaves then pick the best one to press.
- As you pick leaves be sure to document: what tree the leaf came from, city and/or county collected from and date collected. You will need this information later.
- Drier leaves press well. More supple leaves, like magnolia and rhododendron, might need to be dried via a silica gel method rather than the pressing method described below

Pressing Leaves with Weight

To press leaves, choose leaves with low moisture content to avoid molding. Next, sandwich leaves between newspaper or waxed paper.

- Place the leaves wrapped in wax paper or newspaper inside a heavy book. You can also place more books, a weight, or rock on top of the book to add more weight. Or wrapped leaves in wax paper or newspaper and stack weight on top of the leaves.
- Keep your press in a dry location. Check the pressing after about one week. Make sure the leaves are drying and not rotting. If leaves were damp you may need to change the newspaper so it continues to absorb the moisture from the leaf and put it back in or under something heavy. You will probably need to leave the leaves under the book for another one to two weeks before they are completely dry and ready to use.

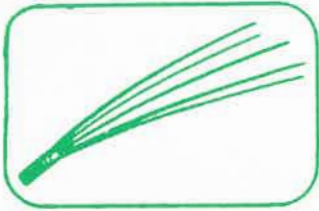
I've never tried this but you could experiment: (If you would like a more supple leaf, soak the leaves in diluted fabric softener before pressing. Or you can try coating the surface of the leaf with a light layer of petroleum jelly.)

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Putting your Forestry Book Together

- Each specimen shall be dried and individually mounted on cardstock or heavy duty 8 1/2" x 11" paper. The specimens may be mounted on self-adhering transparent plastic sheets or other similar material. Gluing the specimen directly to heavy paper or using photo adhesive is also acceptable.
- Pages should be labeled with: proper common name (as listed in 4H334 publication, attached), location collected (city and/or county), and (day, month, year) or (month, day, year) collected.
- Paper with leaves can be slid into clear plastic page protectors and displayed in a conventional three ring binder or similar ringed folder.
- Front of binder should display name, club, age and year in project in a prominent location.
- Pages in binder should be sorted by native and non-native Kansas trees

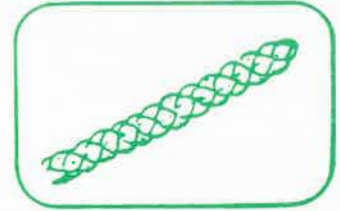
NEEDLE-LIKE OR EVERGREEN LEAVES



1. Needle Shaped



2. Awl Shaped



3. Scale Shaped

Deciduous Leaves



4. Simple



5. Once Pinnately Compound



6. Palmately Compound



7. Twice Pinnately Compound

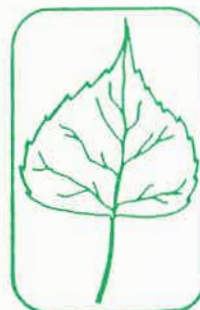
Leaf Shapes



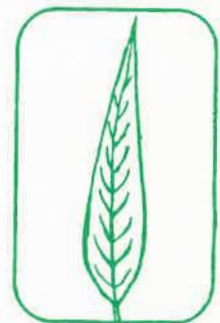
8. Ovate



9. Heart



10. Triangle



11. Lanceolate

Leaf Margins



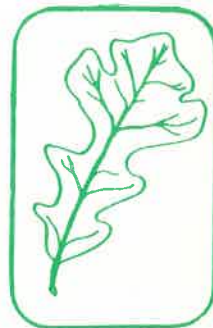
12. Smooth



13. Singly
Toothed



14. Doubly
Toothed



15. Lobed

Leaf Venation

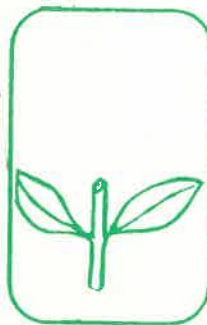


16. Palmately
Veined

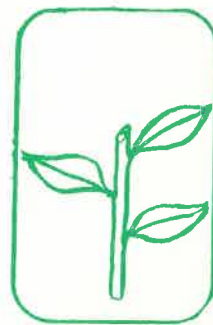


17. Pinnately
Veined

Leaf Arrangement

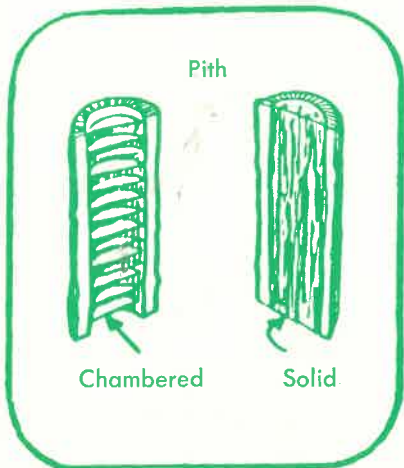


18. Opposite

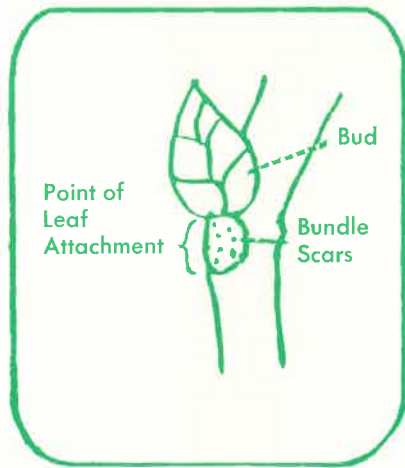


19. Alternate

Stem Structure

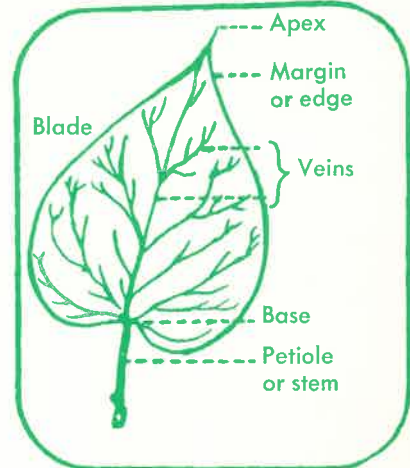


20. Internal



21. External

Leaf Parts



22.



Native Kansas Forest Trees



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Project

This publication constitutes the 4-H Forestry Project Guide for the nomenclature of “Kansas Native Forest Trees.” Use this list to determine whether a tree species is in the native forest or ornamental category. The list consists of only those trees that are readily distinguishable from each other. Where separation by species is difficult, for example Hawthorn, only one listing is provided.

Trees not included in this list are considered

nonnative and should be placed in the “Ornamental Trees” category. Forest trees collected outside of Kansas and not used as ornamentals, for example redwood, may be placed in a separate group entitled, “Forest Trees not Native to Kansas.”

“Horticultural Fruit and Nut Trees” is considered a separate category and should be labeled as such in the collection. Check species against this list to prevent duplication.

List of Kansas Native Forest Trees

Ash, blue <i>Fraxinus quadrangulata</i> Michx.	Cottonwood, eastern <i>Populus deltoides</i> Marsh.	*Hedge — see Osage-orange
Ash, green <i>Fraxinus pennsylvanica</i> Marsh.	Cottonwood, western — not readily distinguishable, list as Cottonwood, eastern.	Hickory, bitternut <i>Carya cordiformis</i> (Wang.) K. Koch
Ash, wafer — see Hop tree	Crabapple — see Wild crabapple	Hickory, black <i>Carya texana</i> Buckl.
Ash, white <i>Fraxinus americana</i> L.	Dogwood, flowering <i>Cornus florida</i> (L.) Raf.	Hickory, kingnut — see Hickory, shellbark
Basswood, American <i>Tilia americana</i> L.	Elm, American <i>Ulmus americana</i> L.	Hickory, mockernut <i>Carya tomentosa</i> Nutt.
Birch, river <i>Betula nigra</i> L.	Elm, red <i>Ulmus rubra</i> Muhl.	Hickory, shagbark <i>Carya ovata</i> (Mill.) K. Koch
Boxelder <i>Acer negundo</i> L.	*Elm, Siberian <i>Ulmus pumila</i> L.	Hickory, shellbark <i>Carya laciniosa</i> (Michx.) Loud.
Buckeye, western <i>Aesculus glabra</i> Willd. var. <i>arguta</i> (Buckl.) Robinson	Elm, slippery — see Elm, red	Honeylocust <i>Gleditsia triacanthos</i> L.
Buckthorn, woolly <i>Bumelia lanuginosa</i> (Michx.) Pers.	Elm, white — see Elm, American	Holly, deciduous <i>Ilex decidua</i> Walt.
*Catalpa, spp. — northern and southern Catalpa not readily distinguishable <i>Catalpa</i> spp.	Hackberry <i>Celtis occidentalis</i> L.	Hophornbeam — see Ironwood
Cherry, black <i>Prunus serotina</i> Ehrh.	Hackberry, dwarf <i>Celtis tenuifolia</i> Nutt.	Hop tree <i>Ptelea trifoliata</i> L.
Chinaberry — see Soapberry	Haw, southern black — see Hawthorn spp.	Ironwood <i>Ostrya virginiana</i> (Mill.) K. Koch
Coffeetree, Kentucky <i>Gymnocladus dioica</i> (L.) K. Koch	Haw, red — see Hawthorn spp.	June berry — see Serviceberry, downy
	Hawthorn spp. <i>Crataegus</i> spp. (Several species, not readily distinguishable.)	*Introduced and naturalized.

Linden — see Basswood, American	Oak, Shumard <i>Quercus shumardii</i> Buckl.	*Tree-of-heaven <i>Ailanthus altissima</i> (Mill.) Swingle
*Locust, black <i>Robinia pseudoacacia</i> L.	Oak, white <i>Quercus alba</i> L.	Walnut, black <i>Juglans nigra</i> L.
Locust, honey — see Honeylocust	*Olive, Russian <i>Elaeagnus angustifolia</i> L.	Wild crabapple <i>Pyrus ioensis</i> (Wood) Bailey
Maple, black — not readily distinguishable; list as Maple, sugar.	*Osage-orange <i>Maclura pomifera</i> (Raf.) Schneid.	Willow, black <i>Salix nigra</i> Marsh.
Maple, hard — see Maple, sugar	Pawpaw <i>Asimina triloba</i> (L.) Dunal.	Willow, Carolina <i>Salix caroliniana</i> Michx.
Maple, silver <i>Acer saccharinum</i> L.	Pecan <i>Carya illinoensis</i> (Wang.) K. Koch	Willow, dwarf prairie <i>Salix humilis</i> Marsh.
Maple, soft — see Maple, silver	Persimmon <i>Diospyros virginiana</i> L.	Willow, peachleaf <i>Salix amygdaloides</i> Anderss.
Maple, sugar <i>Acer saccharum</i> Marsh	Poplar, silver — see Poplar, white	Willow, sandbar <i>Salix interior</i> Rowlee
Mulberry, red <i>Morus rubra</i> L.	*Poplar, white <i>Populus alba</i> L.	*Introduced and naturalized.
*Mulberry, white — not readily distinguishable; list as Mulberry, red	Possumhaw — See Holly, deciduous	
Oak, black <i>Quercus velutina</i> Lam.	Redbud, eastern <i>Cercis canadensis</i> L.	References:
Oak, blackjack <i>Quercus marilandica</i> Muenchh.	Redcedar, eastern <i>Juniperus virginiana</i> L.	Little, E.L. <i>National Audubon Society Field Guide to North American Trees: Eastern Region</i> . Knopf. 1980.
Oak, bur <i>Quercus macrocarpa</i> Michx.	Sassafras <i>Sassafras albidum</i> (Nutt.) Nees.	Stephens, H.A. <i>Trees, Shrubs and Woody Vines in Kansas</i> . University Press of Kansas. Lawrence. 1969.
Oak, chestnut — see Oak, chinkapin	Serviceberry, downy <i>Amelanchier arborea</i> (Michx. f.) Fern.	
Oak, chinkapin <i>Quercus muehlenbergii</i> Engelm.	Soapberry <i>Sapindus drummondii</i> Hook. & Arn.	Written by: Charles J. Barden, Forestry Specialist, K-State Research and Extension
Oak, pin <i>Quercus palustris</i> Muenchh.	Sugarberry <i>Celtis laevigata</i> Willd.	
Oak, post <i>Quercus stellata</i> Wang.	Sycamore, American <i>Platanus occidentalis</i> L.	
Oak, northern red <i>Quercus rubra</i> L.		
Oak, shingle <i>Quercus imbricaria</i> Michx.		

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In each case, credit Charles J. Barden, *Native Kansas Forest Trees*, Kansas State University, April 2006.

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