

KEY TO THE MOST COMMON HILL COUNTRY TREES,
SHRUBS AND VINES

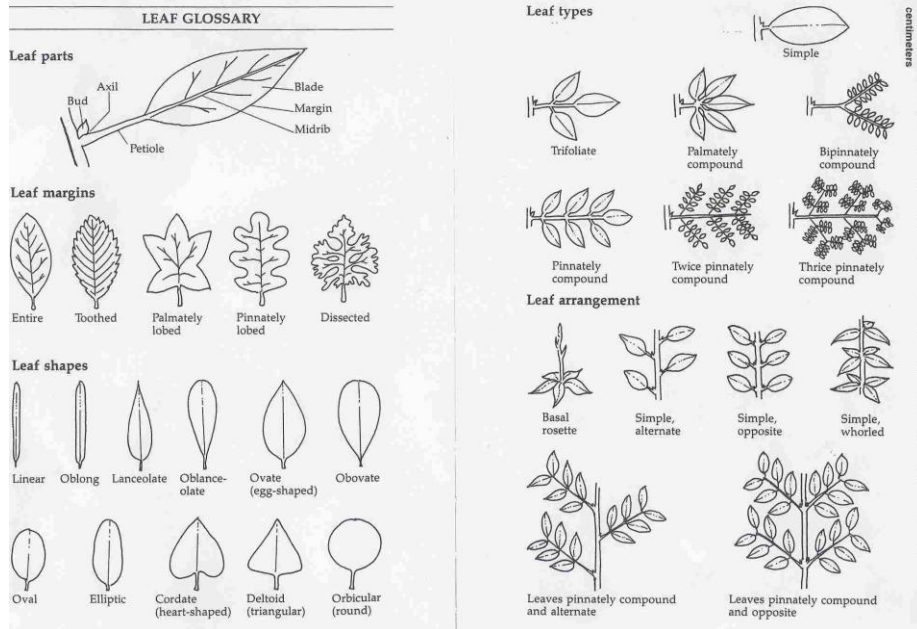
JIM STANLEY

HOW TO USE THIS KEY

This Key is used by first familiarizing oneself with the types of leaves, leaf shapes, leaf margins and terminology found on the following page. Then, the tree at hand is examined to see which type of leaf, which type of leaf margin and leaf arrangement it has as well as the leaf or leaflet shape. Then, the key is read from the beginning until the corresponding leaf type, margin, arrangement and shape is arrived at. At this point the detailed description of each species listed as XXa, XXb, etc is studied to see which description best fits the tree in question. When in doubt, or when two or more possibilities exist, then other books, such as the books listed below, should be consulted.

One should keep in mind that not all leaves or all individual trees of a given species will look identical, and that leaves of small saplings, or the first immature leaves of spring may not look like mature leaves. It is best to observe as many individual trees, and leaves as possible and to also note other possible clues such as tree size, bark, fruit or flowers, and habitat as well.

Descriptions of non-native trees are in *italics*. The words Evergreen and Thorns are underlined for ease in locating.



	SUMMARIES OF UNIQUE FEATURES		
Evergreen Plants	Plants with Thorns	Simple Opposite Leaves	Compound Opposite Leaves
Ash Juniper, 3	Greenbriar 9	Buttonbush 26	<i>Vitex 44</i>
Pinyon Pine 3	Bois d'Arc 14	Desert Willow 26	Texas Buckeye 44
Sotol 6	Bumelia 14	Honeysuckle 29	Texas Ash 44
Yuccas 6	Blanco Crab Apple 17	Bee Brush 29	Box Elder 44
Coral Honeysuckle 29 (usually evergreen)	Agarita 38	Flame Acanthus 29	Trumpet Creeper 9
Silktassel 29	Southern Dewberry 9	Rough Leaf Dogwood 29	
Live Oak 14	Toothache Tree 35	Silktassel 29	<i>Elderberry 44</i>
Texas Persimmon 14 sometimes evergreen	Honey Locust 41	Canyon Mock Orange 29	
Cenizo 14	Roemer Acacia 41	Elbow Bush 29	
Yaupon 23	Fragrant Mimosa 41	Virburnum Rusty Blackhaw S/O/T	
Madrone 17	Huisache 41	Bit Tooth Maple S/O/L	
Monterrey Oak 20	Mesquite 41		
Texas Mt. Laurel 32	Retama 41	<i>Ligustrum 29</i>	
Texas Pistache 32			
Evergreen Sumac 32			
<i>Ligustrum 29</i>			
<i>Magnolia 14</i>			
<i>Names in italics are non-natives</i>			

1. Trees or shrubs with needles or minute scaly leaves 3
2. Not as above.4
-]
 - 3a. Leaves minute, scale-like, evergreen bush or tree to 25', blue "berry-like" cones....."Blueberry cedar" (*Juniperus ashei*)
 - 3b. Leaves minute, scale-like, evergreen bush or small tree, reddish brown "berry-like" cones, Western edge of Edwards Plateau....."Redberry cedar" (*Juniperus pinchotii*).
 - 3c. Linear flat needles 0.25-1" long, pinnately arranged, near water, can be very large tree.....**Bald cypress**
4. Trees or shrubs, leaves with parallel veins, yucca-like.6
5. Not as above.7
- 6a. Leaves 2-3' long, flexible, less than 1" wide, margins with hooked or straight spines, flower stalk 8-15' high.....**Sotol**
- 6b. Leaves 1-2.5' long, stiff, usually twisted, 0.75-2" wide, margins saw-toothed, flower stalk 2-4' high.....**Twist-leaf Yucca**
7. Woody plants with vine-like growth habit.9
8. Not as above.10
- 9a. Vine with simple, alternate, entire leaves, triangular-, heart-, or egg-shaped leathery leaves, 2-5" long usually with spines. Stems with sharp spines, favorite deer food.....**Greenbriar**
- 9b. Vine with simple, alternate, toothed or lobed leaves, 2-6" long, palmately lobed.....**Grape**
- 9c. Vine with compound, alternate, trifoliolate leaf arrangement, 1-4" long irregular lobes, although leaf shape can be highly variable. Often confused with box elder shoots which are in an opposite arrangement.....**Poison Ivy**
- 9d. Vine with compound alternate, palmately-lobed leaves, 2-6", 5 leaflets, margins coarsely toothed..**Virginia creeper**
- 9e. Vine with compound, opposite pinnately, toothed leaves, 5-11 leaflets 1-3" long, coarsely toothed.....**Trumpet creeper**

Other vines are Carolina snailseed and dewberry.

10. Trees and shrubs with simple leaves.....	12
11. Trees and shrubs with compound leaves	30
12. Simple/Alternate/Entire	14
13. Not as above.	15
14a. Leaves 0.5-1" long, elliptic to egg-shaped, gray-green, shrub 3-10', <u>evergreen</u> , purple flowers after rain.....	Cenizo
14b. Leaves 0.5-2" long, obovate to oval, wider at tip, usually inrolled, velvety feel, deciduous to persistent. Fruit on female trees, 1", green in summer, turning black, bark peeling to smooth.....	Texas Persimmon
14c. Leaves 1-3", elliptic to oblanceolate, sometimes clustered, especially on the <u>long thorns</u> , very small white flowers mid-summer, often mistaken for a live oak until the thorns are discovered.....	Gum bumelia
14d. Leaves 1-5", oblong, elliptic or lanceolate, thick, dark green on top, light green on bottom, <u>evergreen</u> except for leaf exchange March-May, new leaves occasionally with points, acorns .5- 1"	Live Oak
14e. Leaves 1-5" long, usually lanceolate with long-tapering tip, sometimes with irregular teeth, usually somewhat rough, bark with "warts", red-orange to brown drupe about .25"	Hackberry (sugar)
14f. Leaves 2-5", oblong to elliptic, prominent midrib and parallel veins, top shiny and smooth, shrub to small tree. Red to black poisonous fruit .37", thornless in spite of name.....	Carolina buckthorn
14g. Leaves 2-6" long and almost as wide, heart shaped, shiny and leathery, long petiole. Flowers before leaves in the early spring.....	Texas redbud
Other less common S/A/E trees are American smoketree, Spicebush, <i>Chinese tallow</i> , Bois d'arc,	
15. Simple/Alternate/Toothed	17
16. Not as above.	18

- 17a. Leaves 1-2" oval, stiff, top rough, small double-toothed, twigs sometimes "winged", samara fringed with hairs..... **Cedar elm**
- 17b. Leaves 2-4", elliptic or lanceolate with pointed apex, fine teeth, top shiny. Bark on small trees or new limbs horizontally stripped, becoming black plates in mature trees, small, .37" drupes..... **Escarpment black cherry**
- 17c. Leaves 1-4", linear, less than 3/16" wide, surface sticky, weedy shrub 3-10', margins with a few teeth or occasionally entire **Willow baccharis or povertyweed**
- 17d. Leaves 2-6", linear to narrowly lanceolate, finely toothed, deeply ridged bark, along streams and wet areas..... **Black willow**
- 17e. Leaves 2-6", lanceolate or oblong with pointed apex, margins sharply and usually doubly toothed, straight parallel veins conspicuous, base uneven, top usually slightly rough, samaras fringed with hairs..... **American elm**
- 17f. Leaves 3-9", lanceolate or oblong with pointed apex, margins sharply and usually doubly toothed, straight parallel veins, conspicuous, base uneven, top sandpapery rough, samaras not with hairs..... **Slippery elm**

Other less common S/A/T trees are Texas madrone, Carolina basswood, Creek plum, Mexican plum, Anaqua, Cottonwood

18. Simple/Alternate/Lobed.....20
19. Not as above.....21
- 20a. Leaves 1-4" long, oblong or elliptic, margins only slightly lobed or wavy, sometimes entire, usually small tree less than 20', frequently in bunches or motts, flaking gray bark diagnostic, many root sprouts around base..... **Shin oak or White shin oak, Quercus sinuata var. breviloba**
- 20b. Leaves 2-5" long, oblong or elliptic, margins only slightly lobed or wavy, top waxy and blue-green or with a grayish cast. Medium to small tree with gray bark, can be distinguished from shin oak by usually being a larger, solitary tree and the bark is not usually shaggy, also leaf color different **Lacey oak**
- 20c. Leaves 3-5" long, deeply lobed with points with bristles, lobes extending at least half way to the midrib, large tree with gray to dark bark frequently with white patches, early to green up in spring, leaves turning red in fall..... **Spanish oak, Texas red oak**
- 20d. Leaves 3-5", lobes rounded without bristles, middle lobe frequently widest making leaf resemble a cross, large erect tree with straight trunk and light colored bark, leaves slightly rough **Post oak**

- 20e. Leaves 3-6", few shallow lobes, elliptic, may be nearly entire, may have many leaf shapes on same tree, dull light green, pinkish new growth, evergreen in the same way a live oak is, not native to Edwards Plateau, **Monterrey oak, Mexican white oak**
- 20f. Leaves 3-6" long, elliptic with slight point at apex, pinnately lobed, prominent midrib and parallel veins which end in shallow lobes with or without bristles, large tree, likes deep soil..... **Chinkapin oak**
- 20g. Leaves 3-7" long, wide, lobed in a way that makes leaf resemble duck foot with bristles at points, shiny, smooth surface. Bark charcoal gray to black..... **Blackjack oak**
- 20h. Leaves 4-8" long and wide, palmately lobed with tips pointed, 3-5 lobes, bark peels to expose smooth, light-colored bark, very large tree, near water..... **Sycamore**
- 20i. Leaves 4-12" long to 6" wide, lobed, sometimes deeply, with rounded lobes and no bristles, no other tree has similar leaves, acorn can be golf ball sized, large tree, likes deep soil..... **Bur oak**

Other less common S/A/L trees are Mulberry and Vasey oak

21. **Simple/Alternate/Crenate** (rounded teeth)23
22. Not as above.24

- 23a. Leaves 1-2" long, oblanceolate, may be notched at apex, leaves sometimes bunched at tips, females have red berries on stem in late fall and winter, usually shrub, can be small tree..... **Possumhaw**

Another less common S/A/C tree is Yaupon

24. **Simple/Whorled/Entire**26
25. Not as Above27

- 26a. Leaves 0.5-1.5" long, oval or elliptic, prominent midrib, long thorns, white flowers in spring, large numbers of red to orange berries in late summer through winter, long thorns, evergreen **pyracantha**

Other less common S/W/E trees are Button bush and Desert willow.

27. Simple/Opposite/Entire29
28. Not as above.	30

- 29a. Leaves 0.5-2" long, elliptic or oval, surfaces smooth, can be fine toothed. Small shrub, branches strictly opposite arrangement, often branching at right angles.....**Elbow bush**
- 29b. *Leaves 0.5-2", usually opposite but can be alternate, obovate to oval, smooth and shiny above, smooth bark, showy purple, white or pink panicles, cultivated shrub or small tree*.....**Crapemyrtle**
- 29c. Leaves 1-3" long, broadly elliptic or oval, leathery, bottom hairy, top becomes shiny with age, may have undulating shape. Usually multi-trunk shrub, evergreen.....**(Mexican) silktassel**
- 29d. *Leaves 2-5" long, ovate to oval, top shiny, smooth, dark green, shrub to small tree, evergreen, has escaped cultivation in many places, black berries poisonous*.....**Ligustrum**

Other less common S/O/E woody plants are Coral and White bush honeysuckle, Beebrush, Flame acanthus, Rough Leaf Dogwood and Canyon mock orange.

S/O/Toothed trees are American beautyberry and Rusty blackhaw virburnum.

An S/O/Lobed tree is Bigtooth maple

30. Compound/Alternate/Entire	32
31. Not as above	33

- 32a. Leaves 1-3" long with 15-31 pairs of tiny leaflets which are 1/8-1/2" long, white flowers on stalks after rain, shrub 3-12' tall, NO Thorns
- 32b. Leaves 2-5" long with 5-9 leaflets, leaflets oval or ovate 0.5-1.5" long, rachis with hairs, evergreen shrub with spreading branches.....**Evergreen sumac**
- 32c. Leaves 4-6" long, 5-11 leaflets which are 1-3" long oval or egg-shaped (widest near tip), frequently notched apex, shiny, evergreen. Flowers purple, smells like grape Koolaid, bean pod 1-5" long, constricted between seeds. Shrub to small tree.....**Texas mountain laurel**
- 32d. Leaves 4-9" long, 9-19 leaflets 3/4-1.5" long oval, pink flowers, dark bean pods constricted between seeds like a string of pearls, shrub to small tree.....**Eve's necklace**

- 32e. Leaves 5-12" long with up to 21 leaflets, flattened or "winged" midrib diagnostic, leaflets narrow lanceolate, somewhat sickle-shaped 3/4" wide or less, new stems reddish, shrub to small tree.....**Prairie flame-leaf sumac.**
- 32f. Leaves 10-16" long, 10 or more lanceolate leaflets 2-4" long, no end leaflet. Male and female trees with separate flowers, only female has 1/4" drupes, medium sized tree.....**Chinese pistache**

Other less common C/A/E trees are Texas pistache and Western soapberry, and Wafer ash (hop tree), trifoliolate.

33. **Compound/Alternate/Toothed**.....35
34. Not as above.36

35a. Leaves 2-5" long with 3-11 leaflets 1/2-1.5" long, ovate, crinkly shape, spines on midrib as well as on branches, thorns on branches resemble rose thorns.....**Toothache tree, Prickly ash, Tickle-tongue**

35b. Leaves 7-12" long with 15 or more lanceolate leaflets which are 2-5" long and 1" or less wide. Nut in round husk 1/2 to 1.5", does not split open. Pith of twigs has walled sections.....**Walnut**

35c. Leaves 8-20" long, 9-17 lanceolate leaflets, 3-8" long, often curving. Nut in husk which splits open when mature, pith of twigs smooth.....**Pecan**

A less common C/A/T tree is Mexican buckeye

36. **Compound/Alternate/Trifoliolate**.....38
37. Not as Above39

38a. Leaves 1-3" long, leaves very stiff with very sharp points, evergreen shrub with yellow flowers and red berries.....**Agarita.**

39. Twice Compound/Alternate41
40. Not AS above.42

41a. Leaves 1-3", bipinnate, 2-7 pairs of pinna, 7-12 pairs of leaflets per pinna, leaflets 1/25-1/16" long. Pink globular flowers, thorns on stems, shrub to 6" ..(two species).....**Lindheimer mimosa or Fragrant mimosa**

41b. Leaves 8-18" long, bipinnate "wishbone" arrangement of pinna, 5-24 pairs of leaflets per pinna, leaflets linear 0.5-2" long. Yellowish slender bean pod (favored by animals), long thorns on branches and trunk, airy shrub to large tree.....**Honey mesquite**

41c. Leaves 12-25" long, leaflets 1-3" long, deeply toothed or lobed, dark green. Lavender blooms on showy panicles, yellow drupes 1/2"**Chinaberry**

Other less common Twice compound Alternate trees are Golden ball leadtree, Roemer's acacia, catclaw acacia, Huisache, and Retama

42. Compound/Opposite/Lobed.....	44
43. Not as above	

44a. Leaves 6-15" long, 3-7 leaflets, often trifoliate, lobed, drooping, "wilting appearance, pale green.....**Box elder**

Compound/Opposite/Palmately lobed tree is a *Vitex* or *Chaste tree*.

