

Early Fall Key to Common North Dakota Trees and Shrubs

A "key" is similar to a road which forks repeatedly and which has signposts indicating what may be found along each branch. This key is based on a system of couplets, 1, 1'; 2, 2'; etc. This gives the reader one of two choices. A number at the right of a description indicates the next step to take. The number in parenthesis after the number at the left indicates where you came from and allows you to back track. Numbers 1-16' on the left cover the evergreens; numbers 17-20' the woody vines; and 21-76' the deciduous trees and shrubs. One herb was included because many people confuse it with poison ivy, a small shrub with which everyone should become familiar in order to avoid it.

The key includes a number of species not pictured but is by no means all-inclusive. The relatively rare species and the horticultural cultivars have been left out because their inclusion would necessarily have increased the complexity of the key and the volume of the publication.

A glossary at the end of the publication explains terms that may be unfamiliar.

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| <p>1. Trees or shrubs whose foliage is needle-like or scale like 2</p> <p>1'. Foliage not needle-like or scale-like but with normal leaves 17</p> <p>2.(1) Many needles from spur shoots on older twigs; deciduous Larches</p> <p>2'. Not over five needles from one point; evergreen 3</p> <p>3.(2') Needles in fascicles (bunches) 4</p> <p>3'. Needles born singly, not in fascicles 7</p> <p>4.(3) Needles per fascicle, 5..... Limber Pine and White Pine</p> <p>4'. Needles per fascicle, 2 or 3 5</p> <p>5.(4') Needles over 4" long, in both 2's and 3's..... Ponderosa Pine</p> <p>5'. Needles less than 3" long, only in 2's 6</p> <p>6.(5') A tree; bark orange and flaky; cone scales not crowded Scotch Pine</p> <p>6'. Usually multi-stemmed and cone scales crowded; shrub-like; bark dark Mugo Pine</p> <p>7.(3') Leaves scale-like or awl-shaped, not over 1/2" long 8</p> <p>7'. Needles linear or needle-like, about 1" long 13</p> <p>8.(7) Branchlets flattened; woody cones only 1/2" long American Arborvitae</p> <p>8'. Branchlets 3 or 4 angled; fruit berrylike 1/4" in diameter 9</p> <p>9.(8') Long trailing native groundcover rarely over 5-10" high Creeping Juniper</p> <p>9'. Shrub at least 2 feet high when mature 10</p> <p>10.(9') Needles 1/2" long, strongly boat shaped or awl like, all sharp Common Juniper</p> <p>10'. Some or all needles scale-like 11</p> | <p>11.(10') Low spreading landscape shrubs (Ornamental) Junipers</p> <p>11'. Treelike 12</p> <p>12.(11') Foliage turning purple-brown in winter Eastern Red-cedar</p> <p>12'. Foliage remaining blue green in winter Rocky Mt. Juniper</p> <p>13.(7') Peglike projections supporting needles; no resin blisters on bark 15</p> <p>13'. Needles fastened directly to twig, leaving a circular leaf scar when removed; resin blisters on bark 14</p> <p>14.(13') Needles sessile; cones disintegrating when mature; buds blunt and resinous Balsam Fir</p> <p>14'. Needles petiolate; cones not disintegrating; papery bracts extending beyond cone scale; buds sharp-pointed, dark purple and not resinous Douglas-fir</p> <p>15.(13) Needles somewhat flattened, 2 ranked; woody cones over 3" long Norway Spruce</p> <p>15'. Needles 4 angled, not 2 ranked; cones 3" long or less 16</p> <p>16.(15') Needles very sharp; cones over 2" long with ragged scales Colorado Spruce</p> <p>16'. Needles only moderately sharp; cones less than 2" long with smooth, rounded edge on cone scales Black Hills White Spruce</p> <p>17.(1') Vines 18</p> <p>17'. Trees, shrubs, or herbs 21</p> <p>18. Leaves compound 19</p> <p>18'. Leaves simple 20</p> <p>19.(18) Leaves alternate; 5 leaflets; fruit a berry Virginia Creeper</p> <p>19'. Leaves opposite; 3 leaflets; fruit an achene Virgin's Bower</p> |
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20.(18')	Margin coarsely serrate; leaves sometimes lobed, fruit a black berry Wild Grape	34.(23')	Most or all leaves lobed 35
20'	Margin fine serrate, leaves never lobed; fruit orange, splitting to show red interior American Bittersweet	34'	Not lobed 43
21.(17')	Shrubs or herbs less than 2' high when mature 22	35.(34)	Leaves opposite 36
21'	Shrubs or trees over 2' high when mature 23	35'	Leaves alternate 38
22.(21)	Small shrub, herb-like; always 3 leaflets, not serrate but sometimes irregularly toothed Poison Ivy	36.(35)	Some leaves not lobed, when lobed always 3, a coarse shrub; fruit a drupe American Cranberrybush
22'	Perennial herb with 3-forked stem, each with 3 or 5 serrate leaflets Wild Sarsaparilla	36'	All leaves lobed, 3 or 5, trees or shrubby trees; fruit a paired samara, called a schizocarp 37
23.(21')	Leaves compound 24	37.(36')	Leaves silvery beneath; lobes of nearly equal length; a large tree Silver Maple
23'	Leaves simple 34	37'	Leaves not silvery beneath; terminal lobe longer than others; small tree or shrublike Amur Maple
24.(23)	Compact branchy shrubs with compound leaves; each leaflet 1/4" wide or less 25	38.(35')	Trees 39
24'	Coarser shrubs or trees with pinnately compound leaves; each leaflet over 1/4" wide 26	38'	Shrubs 41
25.(24)	Stipular prickles present; fruit a pod Pygmy Peashrub	39.(38)	Palmately lobed, white hairy below; bark greenish or gray White Poplar
25'	No stipular spines; fruit globose; achene Shrubby Cinquefoil	39'	Pinnately lobed, not white hairy below 40
26.(24')	Branches with either stipular or corticular spines 27	40.(39')	Bark white and papery Cutleaf Weeping Birch
26'	Branches without spines 28	40'	Bark dark and ridged Bur Oak
27.(26)	Spines stipular; fruit a pod; bark greenish Siberian Peashrub	41.(38')	Leaves 1" long, rhombic ovate to rhombic obovate; fruit a small capsule ... Vanhoutte Spirea
27'	Spines corticular; fruit a fleshy hip, about 1/2" in diameter; bark reddish or brownish Rose	41'	Leaves 2" or 3" long, variably orbicular, fruit a berry 42
28.(26')	Leaves opposite 29	42.(41')	Stems spiny Gooseberry
28'	Leaves alternate 31	42'	Stems not spiny Currant
29.(28)	Palmate five-leaflet leaves; fruit a nutlike capsule Ohio Buckeye	43.(34')	Leaves silvery both sides 44
29'	Leaves not palmate; fruit not a nutlike capsule 30	43'	Upper leaf surface not silvery 46
30.(29')	Leaves regularly serrate; twigs gray; buds brown; fruit (samara) Green Ash	44.(43)	Leaves opposite; fruit red when ripe Silver Buffaloberry
30'	Leaves irregularly toothed; twigs green or reddish brown with a bloom; buds silvery; fruit (schizocarp) Boxelder Maple	44'	Leaves alternate, fruit silvery when ripe 45
31.(28')	Base of petiole encasing bud 32	45.(44')	Petiole 1/8" long; leaves ovate, wavy-curved; fruit globose; shrubby Silverberry
31'	Base of petiole below bud 33	45'	Petiole 1/2" long; leaves lanceolate, flat; fruit ellipsoidal; treelike Russian-olive
32.(31)	Twigs hairy Staghorn Sumac	46.(43')	Leaves opposite or sub-opposite 47
32'	Twigs glabrous Smooth Sumac	46'	Leaves alternate 53
33.(31')	Pith chambered; leaflets 3" long, 1 1/2" wide Black Walnut	47.(46)	Leaves sub-opposite; end of twig modified into a thorn 48
33'	Pith solid; leaflets 1 1/2" long, 1/2" wide European Mountain-ash	47'	Leaves opposite; twigs not thorny 49
		48.(47)	Leaves nearly as broad as long Common Buckthorn
		48'	Leaves over twice as long as broad Dahurian Buckthorn
		49.(47')	Leaves finely serrate, creased Nannyberry Viburnum
		49'	Leaves entire, not creased 50

50.(49')	Pith hollow; petioles less than ½" long	51	64.(63')	Leaves over 2" long, dull above; twigs coarse	American Elm
50'	Pith solid; petioles ½" long or more	52	64'	Leaves 2" long or less; shiny above; twigs fine	Siberian Elm
51.(50)	Small native shrub; fruit white, twig reddish brown	Snowberry	65.(62')	Buds large and gummy; leaves gray or rusty below	Balsam Poplar
51'	Large shrub; fruit orange or red; twigs tan, hollow pith	Tatarian Honeysuckle	65'	Buds not so; leaves not so	66
52.(50')	Twigs bright red; venation arcuate; fruit a white drupe	Redosier Dogwood	66.(65')	Bark and twigs light brown; twigs coarse; fruit a pome	Crabapple
52'	Twigs a greenish or brownish; venation netted; fruit a capsule	Lilac	66'	Bark and twigs a reddish or gray; twigs fine; fruit a drupe	67
53.(46')	Trees	54	67.(66')	Serrations glandular tipped; bark reddish; central stem noticeable	Pin Cherry
53'	Shrubs	69	67'	Serrations without glands; bark gray; branchy crown	68
54.(53)	Leaves conspicuously heart shaped; fruit a nutlet suspended from a bract	American Linden (Basswood)	68.(67')	Petiole hairy; veins prominent; some short twigs thornlike	American Plum
54'	Leaves not so; fruit not so	55	68'	Petiole glabrous; veins not prominent; not thornlike	Chokecherry
55.(54')	Bark white; peeling horizontally, marked by horizontal lenticels	56	69.(53')	Buds with several imbricate scales	70
55'	Bark not so	57	70.(69')	Dark glossy green leaves without serrations; insignificant pinkish-white flowers; black pea-sized pomes	Hedge Cotoneaster
56.(55)	Non-native tree; branches pendulous	Cutleaf Weeping Birch	70'	Leaves at least partially serrate	71
56'	Native tree; branches not pendulous	Paper Birch	71.	Leaves usually double serrate	72
57.(55')	Petioles flattened, about as long as a leaf blade	58	71'	Leaves usually singly serrate	73
57'	Petioles round, less than ¾ as long as leaf blade	59	72.(71)	Petiole hairy; fruit husk without beak	American Hazelnut
58.(57)	Leaves deltoid; bark dark and rough	Cottonwood	72'	Petiole glabrous; fruit husk with a long beak	Beaked Hazelnut
58'	Leaves oval orbicular, bark light and smooth	Quaking Aspen	73.(71')	Leaf apex rounded; leaf shape oval; leaf base entire	Juneberry
59.(57')	Leaves lanceolate; buds with single caplike scale	Willow	73'	Leaf apex pointed; leaf shape ovate, obovate or elliptical; serrate to base of leaf	74
59'	Leaves broader; buds with several imbricate scales	60	74.(73')	Serrations glandular tipped; bark reddish; central stem noticable	Pin Cherry
60.(59')	Twigs usually with definite thorns; leaves prominently doubly serrate	Hawthorn	74'	Serrations without glands; bark gray; branchy crown	75
60'	Twigs without definite thorns; if tree somewhat thorny, leaves singly serrate	61	75.(74')	Petiole hairy; veins prominent; some short twigs thornlike	American Plum
61.(60')	Leaf apex rounded; leaf shape oval; leaf base entire	Juneberry	75'	Petiole glabrous; veins not prominent; not thornlike	76
61'	Leaf apex pointed; leaf shape ovate, obovate, elliptical; serrate to base of leaf	62	76.(75')	Leaves narrowly elliptical; leaf base acute	Sand Cherry
62.(61')	Leaves 2 ranked	63	76'	Leaves ovate or obovate; leaf base rounded or obtuse	Chokecherry
62'	Leaves not 2 ranked	65			
63.(61)	Pith chambered at nodes; fruit a drupe	Common Hackberry			
63'	Pith not chambered; fruit a spring ripening samara	64			