

## Suitable Trees By Soil Drainage Class

**Poorly Drained:** Only trees corresponding to this class may be used in the following soil types: Beaucoup, Carlisle, Condit, Kokomo, Marengo, Montgomery, Muskego, Patton, Pewamo, Rockmill, Sebring, and Westland.

Species	Height (ft.)	Roots	Use
Alder, Black	50-75	Sh. Lat.	Food, SB, MA
Cottonwood	100-150	Sh. Lat. Suckers	Food, Cover, SB, MA
Dogwood, Red Osier	6-10 (shrub)	Sh. Lat.	Food, Cover, SB, GB
Oak, Pin	50-75	Sh. Lat.	Food, GB, MA, Timber
Oak, Swamp Chestnut	60-80	Sh. Lat.	Food, GB, MA
Oak, Swamp White	60-80	Sh. Lat.	Food, GB, MA, Timber
Willow, Black	35-50	Sh. Lat. Suckers	Food, SB, GB

### **Note:**

The Emerald Ash Borer, has been found in Fairfield County and is a real threat to the species of ash here. At this time we do not recommend that you plant green, white, blue or black ash.

**Somewhat Poorly Drained:** Trees in this class are suitable for the following soil types: Aetna, Bennington, Crosby, Canal, Euclid, Fitchville, McGary, Newark, Shoals, and Sleeth.

Species	Height (ft.)	Roots	Use
*Baldcypress	70-90	Sh. Lat.	Cover, SB
*Basswood	75-110	Dp. Lat. Suckers	None
Birch, River	50-75	Sh. Lat.	Food, SB, MA
*Buckeye, Ohio	35-50	Taproot	MA
*Cherry, Black	45-70	Taproot	Food, SB, MA, Timber
*Elms	50-80	Sh. Lat.	Food, SB
Hazelnut	6-12	Sh. Lat.	Food, MA, GB, SB
Hickory, Shagbark	70-80	Taproot	Food, MA, Timber
*Maple, Silver	75-100	Sh. Lat.	Food, SB, MA
*Maple, Sugar	75-100	Sh. Lat.	Food, SB, MA, Timber
Oak, Bur	60-90	Taproot	Food, GB, MA, Timber
*Oak, Red	55-80	Dp. Lat.	Food, GB, MA, Timber
*Oak, Shumard	80-100	Sh. Lat.	Food, GB, MA
*Oak, White	80-100	Taproot	Food, GB, MA, Timber
*Spruce, Norway	60-80	Sh. Lat.	Cover, SB
*Sweetgum	75-100	Dp. Lat.	None
Sycamore	80-100	Sh. Lat. Suckers	Cover, SB, Timber

**Moderately Well Drained:** Trees in this class are suitable for the following soil types: Cardington, Celina, Centerburg, Cincinnati, Corwin, Cruze, Eel, Glenford, Homewood, Jeneva, Lindside, Medway, Tarlton, Thackery, and Zanesville.

Species	Height (ft.)	Roots	Use
Beech, American	70-90	Sh. Lat. Suckers	Food, Cover, SB, GB, MA
Butternut	50-75	Taproot	Food, MA
*Dogwood, White Flowering	25-30	Sh. Lat.	Food, Cover, SB, GB
Gum, Black	50-75	Taproot	Food, SB
*Hawthorn, Washington	20-35	Taproot	Food, SB, BF
Hemlock, Eastern	60-100	Sh. Lat.	Cover, SB
Hickory, Mockernut	50-80	Taproot	Food, SB
Hickory, Pignut	50-60	Taproot	Food, MA
Hickory, Shellbark	30-60	Taproot	Food, MA
*Locust, Black	40-60	Sh. Lat. Suckers	Food, MA
Maple, Red	60-90	Sh. Lat.	Food, SB, MA
Oak, Black	60-80	Taproot	Food, GB, Timber
Oak, Sawtooth	50-70	Dp. Lat.	Food, GB, MA
*Persimmon	40-60	Taproot	Food, MA
*Pine, Austrian	45-55	Taproot	Cover, SB
*Pine, Eastern White	75-100	Dp. Lat.	Cover, SB
*Pine, Red	70-90	Dp. Lat.	Cover, SB
Plum, Wild	20-35	Sh. Lat.	Food, SB
Poplar, Yellow	75-125	Dp. Lat.	Food, BF, Timber
Redbud	20-35	Sh. Lat.	None
*Serviceberry	35-50	Sh. Lat.	Food, SB, MA
Spruce, Blue	70-90	Dp. Lat.	Cover, SB
Walnut, Black	80-100	Taproot	Food, Timber

**Well Drained:** Trees suitable for this class may be planted in the following soil types: Alford, Amanda, Berks, Cedarfalls-Rock, Chagrin, Eldean, Fox, Gallman, Germano, Gessie, Gilpin, Hickory, Loudonville-Steinsburg, Miamian, Miamian-Thrifton, Negley, Ockley, Pike, Rossburg, Shelocta, Stonelick, Wea, and Wellston.

Species	Height (ft.)	Roots	Use
Beech, American	70-90	Sh. Lat. Suckers	Food, Cover, SB, GB, MA
Oak, Chinquapin	35-50	Dp. Lat.	Food, GB, MA
Oak, Northern Red	55-80	Dp. Lat.	Food, GB, MA Timber
Oak, Shingle	50-60	Dp. Lat.	Food, MA
Oak, White	80-100	Taproot	Food, GB, MA, Timber
Pine, Pitch	50-75	Taproot	Cover, SB
Pine, Short Leaf	80-100	Taproot	Cover, SB
Pine, Virginia	40-70	Sh. Lat.	Cover, SB
Walnut, Black	80-100	Taproot	Food, MA, Timber

**Legend**

**Height:** Average height of mature tree.

**Roots:** Typical rooting pattern of tree in average conditions.

“Sh. Lat.” denotes shallow lateral systems typically found in upper 2-3 feet of soil and extending 1-3 times the crown spread.

“Dp. Lat.” denotes deep lateral systems that extend out from tree and deepen as tree grows. “Taproot” denotes root system is a deeply penetrating taproot. “Suckers” indicates if the species is known to form suckers or root sprouts.

\*: Denotes tree species that may be planted in better drained soils than the one specified.

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**Wildlife Use:** Food and cover are indicated. The animal species for which the tree species are most valuable are indicated by “BF” for butterflies, “GB” for game birds, “SB” for song birds, and “MA” for small mammals.

**Spacing:** Suggested spacings for other uses are as follows:  
 Single row windbreaks 6' x 6'  
 General reforestation 8' x 8'  
 Sites needing mowed 10' x 10'  
 2 row staggered windbreaks 12' x 12'  
 Windbreaks 16' x 16'

**Number of Trees per Acre**

		Spacing between Rows (ft.)								
		6	7	8	9	10	11	12	15	
Spacing within Rows (ft.)	6	1210	1037	908	807	726	660	605	484	
	7	1037	889	778	691	622	566	519	415	
	8	908	778	681	605	545	495	454	363	
	9	807	691	605	538	484	440	403	323	
	10	726	622	545	484	436	396	363	290	
	11	660	566	495	440	396	360	330	264	
	12	605	519	454	403	363	330	303	242	
	15	484	415	363	323	290	264	242	194	



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NRCS Natural Resources Conservation Service

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# Tree Planting Guide



A Plant Selection Guide for Soils of Fairfield County, Ohio