



# Legacy Land & Wildlife LLC Tree Planting Guide

## Tree Planting Spacing & Stocking Per Objectives

<u>Tree Planting Objective</u>	<u>Spacing (wr x br)</u>	<u>Stocking (trees/acre)</u>
Mixed hardwood forest establishment, timber, forest wildlife habitat, multiple forest uses	5 ft x 8 ft	1089
	to 8 ft x 8 ft	to 680
Black walnut for timber (using standard nursery stock)	8 ft x 8 ft	680
	to 8 ft x 10 ft	to 545
Nut or seed production	15 ft x 15 ft	194
	to 25 ft x 25 ft	to 70
Oak savannah	20 ft x 20 ft	109
	6 ft x 6 ft	1210
Pine for erosion control	to 7 ft x 7 ft	to 889
	8 ft x 10 ft	545
Pine for wildlife cover and windbreaks	to 20 ft x 20 ft	to 109

## Crucial Calculations for Tree Planting

$$TPA = \frac{43560 \text{ ft}^2 / A}{\text{Space}_{wr} (\text{ft}) \times \text{Space}_{br} (\text{ft})}$$

$$\text{Spacing} (\text{ft}^2) = \sqrt{\frac{43560 \text{ ft}^2 / A}{TPA}}$$

$$\text{No. Trees Needed} = \frac{A_p \times 43560 \text{ ft}^2 / A}{\text{Space}_{wr} \times \text{Space}_{br}}$$

*TPA* = trees per acre

*wr* = within row

*br* = between row

*A* = acres

*A<sub>p</sub>* = total project acres

**Figure 3.** Equations for calculating number of trees per acre, spacing, and total number of trees needed to plant selected area

Note: The information above was taken from *Planting Forest Trees and Shrubs in Indiana* by Ron Rathfon, Doug Jacobs, and Lenny Farlee (FNR-IDNR-36, p. 7, 8)

## Tree Spacing for Planting / Trees Per Acre

<b>B/t Trees</b>	<b>B/t Rows</b>	<b>Trees/Acre</b>	<b>B/t Trees</b>	<b>B/t Rows</b>	<b>Trees/Acre</b>
5	6	1452	11	6	660
5	7	1245	11	7	566
5	8	1089	11	8	495
5	9	968	11	9	440
5	10	871	11	10	396
5	11	792	11	11	360
5	12	726	11	12	330
6	6	1210	12	6	605
6	7	1037	12	7	519
6	8	908	12	8	454
6	9	807	12	9	403
6	10	726	12	10	363
6	11	660	12	11	330
6	12	605	12	12	303
7	6	1037	13	6	558
7	7	889	13	7	479
7	8	778	13	8	419
7	9	691	13	9	372
7	10	622	13	10	335
7	11	566	13	11	305
7	12	519	13	12	279
8	6	908	14	6	519
8	7	778	14	7	444
8	8	681	14	8	389
8	9	605	14	9	346
8	10	545	14	10	311
8	11	495	14	11	283
8	12	454	14	12	259
9	6	807	15	6	484
9	7	691	15	7	415
9	8	605	15	8	363
9	9	538	15	9	323
9	10	484	15	10	290
9	11	440	15	11	264
9	12	403	15	12	242
10	6	726	16	7	389
10	7	622	16	8	340
10	8	545	16	9	303
10	9	484	16	10	272
10	10	436	16	11	248
10	11	396	16	12	227
10	12	363	16	13	209

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