

Estimating Planting Stock for Woody Plantings

3/27/2002

Owner/operator: Oscar Madison

Conservationist: Felix Unger

Date: #####

Location: 12 miles south of Whitetail Crossing on Dry Bones Creek. Fields 8, 9, 13, 16, 21, 29

INSTRUCTIONS

1. This worksheet is designed to calculate the number of plants for area, not linear, plantings. It applies to forest, wildlife, riparian, streambank and critical area plantings.
2. Fill in shaded areas and the worksheet will calculate plants needed for each zone and display stocking expressed as a percent of mixture, canopy cover, or recommended plant spacing.
3. For riparian areas, use the RIPARIAN ACREAGE CALCULATOR table to estimate the plantable acreage in each zone. Enter those acres in the planting calculator table.
4. Adjust numbers in the Plants/acre column in the PLANT CALCULATOR to achieve the desired stocking according to the appropriate practice standard.

RIPARIAN ACREAGE CALCULATOR

STREAM NAME: Dry Bones Creek

Reach	Channel Length ft	Ave Buffer Width ft*	Total Acres
N boundary to corrals	630	220	3.2
corrals to co. road	1660	140	5.3
Co. road to red gate	470	160	1.7
Red gate to S bndry	2150	440	21.7
			0.0
			0.0
Totals	4910		32.0

Ave buffer width 284

Zone 1: Wet			Zone 2: Mesic			Zone 3: Dry			Total Plantable		
**% total Acres	%	Ac	% total Acres	%	Ac	% total Acres	%	Ac	% total	Acres	
30%	1.0	0.9	60%	1.9	40%	0.8	10%	0.3	20%	0.1	
20%	1.1	0.8	40%	2.1	80%	1.7	40%	2.1	25%	0.5	
40%	0.7	0.3	60%	1.0	50%	0.5		0.0		0.0	
25%	5.4	5.4	60%	13.0	90%	11.7	15%	3.3	10%	0.3	
	0.0	0.0		0.0		0.0		0.0		0.0	
	0.0	0.0		0.0		0.0		0.0		0.0	
	0.0	0.0		0.0		0.0		0.0		0.0	
	8.1	7.4		18.1		14.7		5.7		0.9	

Total Plantable	
% total	Acres
100%	1.7
100%	3.0
100%	0.9
100%	17.5
0%	0.0
0%	0.0
0%	0.0
	23.1

* Ave buffer width = left and right banks combined. **%total = zone to total acres in reach. %plantable = area within zone below target stocking levels that is not able to regenerate naturally.

PLANT CALCULATOR

Species	Crown Width	Desired Spacing
quaking aspen	10	6
black cottonwood	15	10
ponderosa pine	6	10
river birch	6	6
thinleaved alder	6	6
red-osier dogwood	6	6
geyer willow	6	4
woods rose	4	3
snowberry	4	3
mockorange	6	4
Totals		

Average spacing

Acres: 7.4					Acres: 14.7					Acres: 0.9					Total	
Zone:					Zone:					Zone:						
Plants per acre	total	% mix	% cancov	% spcng	Plants per acre	total	% mix	% cancov	% spcng	Plants per acre	total	% mix	% cancov	% spcng		
100	740	11%	18%	8%		0	0%	0%	0%		0	0%	0%	0%	740	
200	1480	21%	81%	46%	50	735	3%	20%	11%		0	0%	0%	0%	2215	
	0	0%	0%	0%		0	0%	0%	0%	100	90	11%	6%	23%	90	
100	740	11%	6%	8%		0	0%	0%	0%		0	0%	0%	0%	740	
100	740	11%	6%	8%		0	0%	0%	0%		0	0%	0%	0%	740	
250	1850	26%	16%	21%	300	4410	21%	19%	25%		0	0%	0%	0%	6260	
200	1480	21%	13%	7%	300	4410	21%	19%	11%		0	0%	0%	0%	5890	
	0	0%	0%	0%		0	0%	0%	0%	400	360	42%	12%	8%	360	
	0	0%	0%	0%	400	5880	28%	12%	8%	400	360	42%	12%	8%	6240	
	0	0%	0%	0%	400	5880	28%	26%	15%	50	45	5%	3%	2%	5925	
	0	0%	0%	0%		0	0%	0%	0%		0	0%	0%	0%	0	
	950	7030	100%	141%	99%	1450	21315	100%	97%	71%	950	855	100%	33%	42%	29200

7

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