

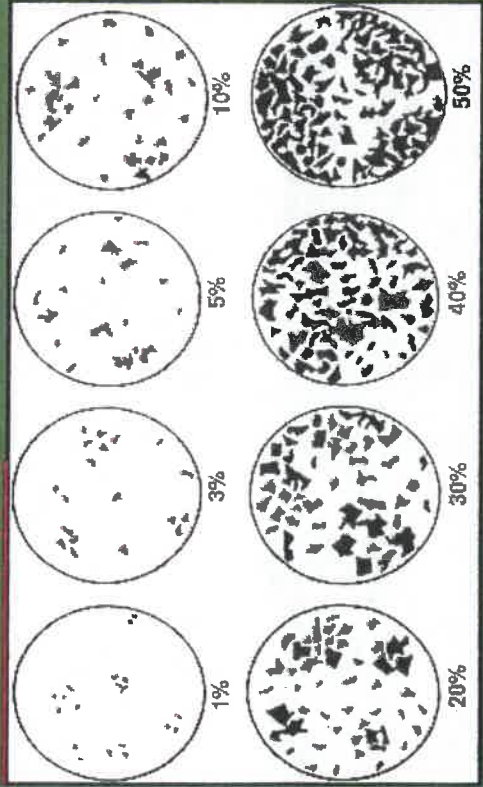
# NY-NRCS Forestry Clipboard Tables

**Forest Inventory:** The inventory process is used to collect information and data about a planning area's resources. This information is further used to define the problems and opportunities, and to formulate and evaluate alternatives necessary to sustain the ecosystem. Much of the understanding a land manager acquires about the nature of their resources, on which they may base many of their decisions, is derived from and is a reflection of the inventory of the forest resources. Forest inventory designs will often vary depending on the existing site conditions and landowner's management objectives.

## Forestry Conversion Factors

- 1 board foot = 12" wide x 12" long X 1" thick
- 1 cord = 85 cubic feet wood or 128 cuft wood + voids
- 1 meter = 39.37"; 1 Chain = 66'
- 1 acre = 43,560 sq. ft. = 4,047 sq. meters = 0.405 hectares=10 square chains
- 1 - acre plot = 118' radius or 209' x 209' square
- 1/2 - acre plot = 83.3 feet radius or 147.6 feet x 147.6 feet
- 1/4 - acre plot = 58.9 feet radius or 104.4 feet x 104.4 feet
- 1/10-acre plot = 37.2 feet radius or 66 feet x 66 feet
- 1/20-acre plot = 26.3 feet radius or 46.7 feet x 46.7 feet
- 1/100-acre plot = 11.8 ft. radius or 20.9 feet x 20.9 feet
- 1/250-acre plot = 7.4 feet radius or 13.2 feet x 13.2 feet
- 1/500-acre plot = 5.3 feet radius or 9.3 feet x 9.3 feet
- 1/1000-acre plot = 3.7 feet radius or 6.6 feet x 6.6 feet

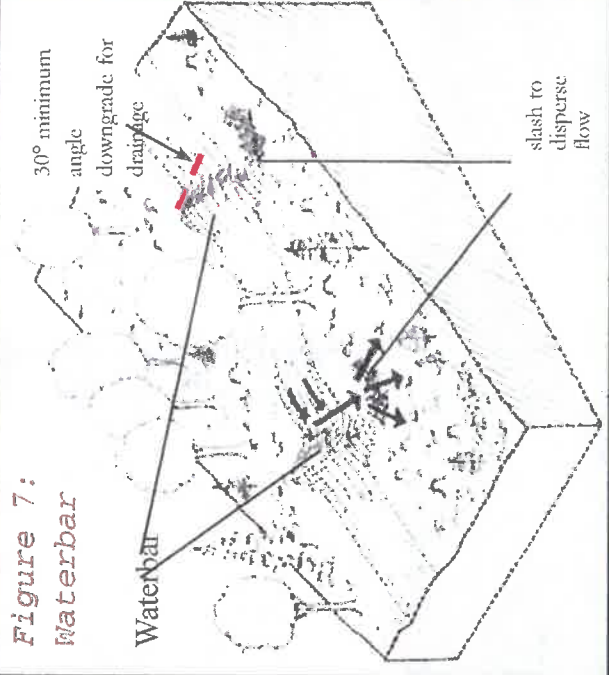
## Cover in Percent



## Average Spacing and Trees/Acre

3' = 4840	14' = 222	25' = 70	36' = 34
4' = 2722	15' = 194	26' = 65	37' = 32
5' = 1742	16' = 170	27' = 60	38' = 30
6' = 1210	17' = 151	28' = 55	39' = 29
7' = 888	18' = 135	29' = 52	40' = 27
8' = 681	19' = 121	30' = 48	50' = 17
9' = 538	20' = 109	31' = 45	60' = 12
10' = 436	21' = 99	32' = 43	70' = 9
11' = 360	22' = 90	33' = 40	80' = 7
12' = 304	23' = 83	34' = 38	90' = 5
13' = 258	24' = 76	35' = 36	100' = 4

Figure 7:  
Waterbar



## Water bar Spacing Guidelines

% Grade	Distance* (ft)
2	250
5	135
10	80
15	60
20	45
25	30
30	25

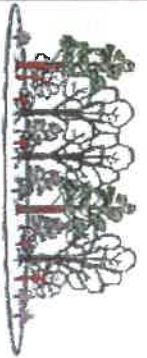
\*Measured on/along road slope.



# NY-NRCS Forestry Clipboard Tables

**Forest Stand:** A forest is divided into separate management units called stands. A stand is a group of trees that are similar in character (age, size, density, land quality, species composition, etc.).

Common Forest Stand Layers or Strata



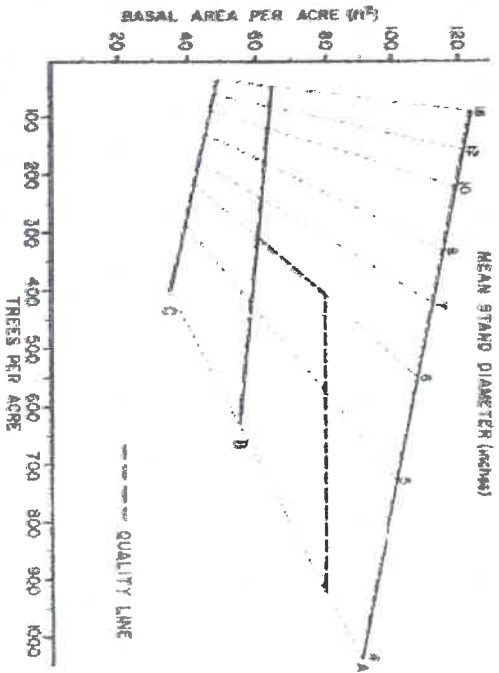
Main Stand Secondary Stand  
Secondary Stand Main Stand  
Understory Understory



Secondary Stand  
Main Stand



## Northern Hardwood Stocking Chart

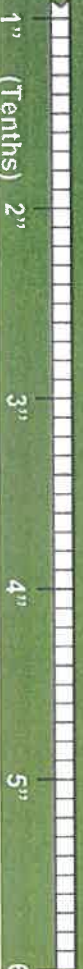


-Stocking chart for northern hardwoods is based on trees in the main crown canopy. The A line is average maximum stocking. The B line is recommended minimum stocking for adequate growth response per acre. The C line defines the minimum amount of acceptable growing stock for a manageable stand. The quality line defines the stocking measure in young stands for maintaining quality stem development.

DBH	Rate of Tree Growth																	
	Rings per Inch (RPI)																	
2	100.0%	66.7%	50.0%	40.0%	33.3%	28.6%	25.0%	22.2%	20.0%	18.2%	16.7%	15.4%	14.3%	13.3%	12.5%	11.8%	11.1%	
3	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	
4	33.3%	22.2%	16.7%	13.3%	11.1%	9.5%	8.3%	7.4%	6.7%	6.1%	5.6%	5.1%	4.8%	4.4%	4.2%	3.9%	3.7%	
5	25.0%	16.7%	12.5%	10.0%	8.3%	7.1%	6.3%	5.6%	5.0%	4.5%	4.2%	3.8%	3.5%	3.3%	3.1%	2.9%	2.8%	
6	20.0%	13.3%	10.0%	8.0%	6.7%	5.7%	5.0%	4.4%	4.0%	3.6%	3.3%	3.1%	2.9%	2.7%	2.5%	2.4%	2.2%	
7	16.7%	11.1%	8.3%	6.7%	5.6%	4.8%	4.2%	3.7%	3.3%	3.0%	2.8%	2.6%	2.4%	2.2%	2.1%	2.0%	1.9%	
8	14.3%	9.5%	7.1%	5.7%	4.8%	4.1%	3.6%	3.2%	2.9%	2.6%	2.4%	2.2%	2.0%	1.9%	1.8%	1.7%	1.6%	
9	12.5%	8.3%	6.3%	5.0%	4.2%	3.6%	3.1%	2.8%	2.5%	2.3%	2.1%	1.9%	1.8%	1.7%	1.6%	1.5%	1.4%	
10	11.1%	7.4%	5.6%	4.4%	3.7%	3.2%	2.8%	2.5%	2.2%	2.0%	1.9%	1.7%	1.5%	1.4%	1.3%	1.2%	1.2%	
11	10.0%	6.7%	5.0%	4.0%	3.3%	2.9%	2.6%	2.2%	2.0%	1.8%	1.7%	1.5%	1.4%	1.3%	1.3%	1.2%	1.1%	
12	9.1%	6.1%	4.5%	3.6%	3.0%	2.6%	2.3%	2.0%	1.8%	1.7%	1.5%	1.4%	1.3%	1.2%	1.1%	1.1%	1.0%	
13	8.3%	5.6%	4.2%	3.3%	2.8%	2.4%	2.1%	1.9%	1.7%	1.5%	1.4%	1.3%	1.2%	1.1%	1.0%	1.0%	0.9%	
14	7.7%	5.1%	3.8%	3.1%	2.6%	2.2%	1.9%	1.7%	1.5%	1.4%	1.3%	1.2%	1.1%	1.0%	1.0%	0.9%	0.9%	
15	7.1%	4.8%	3.6%	2.9%	2.4%	2.0%	1.8%	1.6%	1.4%	1.3%	1.2%	1.1%	1.0%	1.0%	0.9%	0.8%	0.8%	

## Basal Area Factor 10

(At 24" reach from eye)



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