



Michigan Technical Note
USDA-Natural Resources Conservation Service

FORESTRY #26

Subject: ZIGZAG TRANSECT WORKSHEET

Date: January, 2010

Client:		Date:		County:		Total Forest Acres:	
Tract #:		Field #:		Property Location:		Land Unit Acres*:	
Planner:				Predominant Soil Type(s):			
Landowner	(assign priority – 1, 2, 3, etc.)						
Objectives:	<input type="checkbox"/> Forest Products <input type="checkbox"/> Wildlife <input type="checkbox"/> Recreation <input type="checkbox"/> Aesthetics <input type="checkbox"/> Other: _____						

* Conduct a separate inventory for different forest types or land units. Use one sheet per land unit.

Zigzag Transect Data for Trees in Main Stand

This worksheet is for use with zigzag transect inventories only. See instructions for zigzag transects, and information about other inventory methods, in the NRCS National Forestry Handbook-Sec.636.2: <http://soils.usda.gov/technical/nfhandbook>.

Tree Species Abbreviate as needed (ro=red oak, etc.); be sure to avoid confusion with similarly abbreviated species.	Distance Between Trees to nearest foot	Diameter DBH = diameter to nearest 0.1in. @ 4.5 ft. above ground	Condition of Tree 1=good; 2=fair; 3=poor	% Defect of Tree approx.	Basal Area measure at every 5 th tree w/ 10-factor prism	Notes
1						
2						
3						
4						
5					BA:	
6						
7						
8						
9						
10					BA:	
11						
12						
13						
14						
15					BA:	
16						
17						
18						
19						
20					BA:	
Sum:						

Summary

Species by Percent in Stand (no. of each species counted divided by total trees inventoried times 100)			Spp: _____, ____%
Spp: _____, ____%	Spp: _____, ____%	Spp: _____, ____%	Spp: _____, ____%
Average Condition (sum of condition rating divided by total number of trees inventoried)			
% Defect of Trees (sum of % defect divided total number of trees inventoried)			
Existing Average Spacing (sum of distances between trees divided by total number of trees invent'd)			
Average Tree Diameter (sum of tree diameters divided by total number of trees inventoried)			
Average Basal Area/ac. (sum of BA measurements divided by total number of BA points)			
Planned Optimum Spacing (in feet)		for Conifers (Avg. DBH (in inches.) plus 6)	
		for Hardwoods (Avg. DBH (in inches) times 1.67)	
Planned Trees Per Acre (43560 divided by Planned Optimum Spacing squared)			

Refer to MI-NRCS Forest Stand Improvement Standard (666) and associated conservation sheets, and the USDA-NRCS Forestry Handbook for more information.