

**Environmental and Natural Resources
Soil Profile Scorecard – 100 points
PART 1- 60 points**

Name: _____

Participant No.: _____

State: _____

Team No.: _____

Soil Factors – Part 1		Interpretation of Soil Factors	
Check Appropriate Box		Check Appropriate Box	
Score		Score	
	Texture <i>Sur. Sub.</i> ☐ 3 ☐ 1. Coarse ☐ 1 ☐ 2. Moderately Coarse ☐ 1 ☐ 3. Medium ☐ 1 ☐ 4. Moderately Fine ☐ 1 ☐ 5. Fine		E. Permeability ☐ 3 1. Rapid ☐ 1 2. Moderate ☐ 1 3. Slow ☐ 2 4. Very Slow
	B. Depth of Soil ☐ 1 1. Deep >40" ☐ 1 2. Moderately Deep 20"-40" ☐ 3 3. Shallow 10"-20" ☐ 7 4. Very Shallow <10"		F. Surface Runoff <i>Slope</i> ☐ 3 1. Rapid > 3% ☐ 1 2. Moderate 1-3% ☐ 1 3. Slow 0-1% ☐ 2 4. Very Slow <i>standing H₂O</i>
	C. Slope ☐ 1 1. Nearly Level 0-1% ☐ 2 2. Gently Sloping 1-3% ☐ 3 3. Moderate Sloping 3-5% ☐ 4 4. Strongly Sloping 5-8% ☐ 6 5. Steep 8-15% ☐ 6 6. Very Steep > 15%		G. Major Factors That Keep Area Out of Class 1 ☐ 1. Texture ☐ 6. Runoff ☐ 2. Depth ☐ 7. Wetness ☐ 3. Slope ☐ 8. Flooding ☐ 4. Erosion ☐ 9. None ☐ 5. Permeability
	D. Erosion – Wind and Water ☐ 1 1. None to Slight < 25% ☐ 2 2. Moderate 25-75% ☐ 6 3. Severe > 75% ☐ 6 4. Very Severe > 75% w/ Gullies		H. Land Capability Class ☐ 1. Class I ☐ 5. Class V ☐ 2. Class II ☐ 6. Class VI ☐ 3. Class III ☐ 7. Class VII ☐ 4. Class IV ☐ 8. Class VIII
Total Score Column		Total Score Column	
		Total Score PART 1	

Class 5
< 3%
Slope

Soil Profile Scorecard PART 2- 40 points

Recommended Treatments – Part 2		Check Appropriate Box
Score		
Windbreak Woodlot Timber Windbreak Woodlot Timber	A. Vegetative	
	☐ 1. Row crop/occasional soil conserving crop 1 ☐ 2. Row crop/frequent soil conserving crop 2 ☐ 3. Row crops not more than 2 out of 4 years 3 ☐ 4. Row crops not more than 1 out of 5 years 4 ☐ 5. Return crop residue to the soil ☐ 6. Practice conservation tillage > 1-4 classes ☐ 7. Establish recommended grass or grasses & legumes ☐ 8. Proper pasture and range management ☐ 9. Protect from burning ☐ 10. Control grazing ☐ 11. Plant recommended trees ☐ 12. Harvest trees selectively → woodlot, Timber ☐ 13. Use only for wildlife or recreation area class 8	
	B. Mechanical	
	☐ 14. Control brush or trees 1-6 > 2" diameter ☐ 15. Terrace and farm on contour > 1% slope if cultivated ☐ 16. Maintain terraces w/ # 15 ☐ 17. Construction diversion terraces overhead H ₂ O Apparent ☐ 18. Install drainage system moderately wet – H ₂ O visible ☐ 19. Control gullies > 6" deep, 12" wide ☐ 20. No mechanical treatment needed	
	C. Fertilizer and Soil Amendments	
	☐ 21. Soil amendments pH lime Sulfur ☐ 22. Phosphorous [P] < 60 < 6.3 > 8.0 ☐ 23. Potassium [K] < 300 ☐ 24. Nitrogen [N] if deficient ☐ 25. Fertilizer or soil amendments not needed	
	Total Score PART 2 -40	
	Total Score PART 1 – 60	
	GRAND Total Score – 100	

Judge's Name

Judge's Signature