

Soil Study and Land Evaluation Scorecard Part I

SITE				SURFACE SOIL	
Position in Landscape (5 points)	Slope (5 points)	Type and Degree of Erosion or Deposition (5 points)		Texture (5 points)	Structure (5 points)
Upland Hilltop or Plain ☐ Sloping Hillside ☐ Depression and/or drainage way ☐ Stream Bottom Or Bench Nearly level ☐ Sloping ☐ Depressional ☐	Nearly Level ☐ 0 – 2 % Gently Sloping ☐ 2 – 6 % Moderately Sloping ☐ 6 – 12 % Strongly Sloping ☐ 12 – 20 % Steep ☐ 20 – 30 % Very Steep ☐ 30% or greater	None to Slight Water ☐ Over 75% of the Wind ☐ original surface soil remains Moderate Water ☐ 25 to 75% of the Wind ☐ surface soil remains (some mixing of subsoil with surface layer) Severe Water ☐ Less than 25% of Wind ☐ surface soil remains (Plow layer mostly subsoil material) Deposition ☐ By wind or water		Coarse ☐ Sands and Loamy sands Moderately Coarse ☐ Sandy Loam Medium ☐ Loam, Silt, Silt loam Moderately Fine ☐ Clay loam, Sandy clay loam, Silty clay loam Fine ☐ Sandy clay, Silty clay, Clay Organic ☐ Peat and Muck	Loose ☐ Single grained Granular ☐ Fragments small, Mostly rounded Blocky ☐ Fragments irregular, Some sharp corners Platy ☐ Fragments flat and thin Cloddy ☐ Fragments large and irregular
SUBSOIL (thickest or most prominent layer below surface soil) – <i>Answer regardless of soil depth</i>		SOIL PROFILE			SOIL TEST REPORT
Texture (5 points)	Structure (5 points)	Natural Drainage (5 points)	Depth of soil Favorable for Roots (5 points)	Soil Fertility and Nutrient Management (5 points)	
Coarse ☐ Sands and Loamy sands Moderately Coarse ☐ Sandy Loam Medium ☐ Loam, Silt, Silt loam Moderately Fine ☐ Clay loam, Sandy clay loam, Silty clay loam Fine ☐ Sandy clay, Silty clay, Clay Organic ☐ Peat and Muck	Loose ☐ Single grained Granular ☐ Fragments small, Mostly rounded Blocky ☐ Fragments irregular, Some sharp corners Platy ☐ Fragments flat and thin Prismatic, Columnar or Massive ☐ Large fragments	Very Poorly ☐ Organic Poorly ☐ Mottling above 12” Somewhat Poorly ☐ Mottles between 12” and 36” Moderately Well or Well ☐ No mottles above 36”	Over 40 inches ☐ 20 to 40 inches ☐ 12 to 20 inches ☐ Less than 12 inches ☐ Root growth of crops <u>MAY</u> be limited by: Sand gravel layers Bedrock Soil pans Marl	pH adjustment ☐ Nitrogen ☐ Phosphorus ☐ Potassium ☐ NOTE: CHECK ALL NEEDED AMENDMENTS Note: If Land Use ID is WOODLAND or WILDLIFE, then Soil Test Report is NOT APPLICABLE and NO should be chosen	

Soil Study and Land Evaluation Scorecard Part II-V

PART II. Soil Limitations

Potential Score 14 Pts (2 Pts per Correct Answer)

Mark all characteristics. **Yes** if limiting, **No** if not limiting.

Yes No

- ☐ ☐ 1. Soil subject to sheet, rill, or wind erosion
- ☐ ☐ 2. Subject to occasional overflow or flooding
- ☐ ☐ 3. Surface drainage restricted
- ☐ ☐ 4. Subsoil drainage restricted from high water table
- ☐ ☐ 5. Low available water capacity
- ☐ ☐ 6. Stoniness
- ☐ ☐ 7. No major limitations

PART III. Land Capability Classes

Potential Score 7 Pts. 3 Pts if Answer 1 Class Off

Mark **one** Land Capability Class that is most appropriate.

_____ **CLASS I:** May be safely used for intensive production, such as continuous row crops, pasture, woodland, and wildlife habitat.

_____ **CLASS II:** Requires general conservation systems and can be used for crop production, pasture, woodland, and wildlife habitat.

_____ **CLASS III** Requires specific practices and conservation systems and can be used for crop production, pasture, woodland, and wildlife habitat.

_____ **CLASS IV** Requires intensive conservation systems and practices and can be used for crop production, pasture, woodland, and wildlife habitat.

CLASS V *NOT APPLICABLE IN WISCONSIN*

_____ **CLASS VI** Generally ill-suited for cropland. Recommend permanent pasture, woodland or wildlife habitat. Use conservation practices for all land uses.

_____ **CLASS VII** Use very carefully for pasture. Improve for woodland or wildlife. Needs careful conservation.

_____ **CLASS VIII** Reserve for wildlife habitat. Not suitable for agricultural or commercial plant production.

PART IV. Conservation Practices for Long Term Land Use

Potential Score 26 Pts (2 Pts Per Correct Answer)

Mark all practices, **Yes** if it is needed, **No** if not needed, for most-intensive land use, unless otherwise indicated on Pit Information Card.

Yes No

- ☐ ☐ 1. Develop and implement a nutrient management plan
- ☐ ☐ 2. Use residue management and/or plant cover crop
- ☐ ☐ 3. Contour farming, contour buffer strips, contour strip cropping, or terraces
- ☐ ☐ 4. Maintain existing terraces, diversions or erosion control structures
- ☐ ☐ 5. Construct or maintain grassed waterways
- ☐ ☐ 6. Renovate or otherwise improve pasture
- ☐ ☐ 7. Eliminate or manage grazing
- ☐ ☐ 8. Improve timber stand or plant adapted trees in woodland
- ☐ ☐ 9. Establish or maintain windbreaks
- ☐ ☐ 10. Protect stream banks or lakeshore
- ☐ ☐ 11. Improve fish and wildlife habitat
- ☐ ☐ 12. Establish/maintain riparian forest buffer or grass filter strip
- ☐ ☐ 13. Control invasive species that are present

PART V. Non-Ag Land Use Limitations

Potential Score 3 Pts (1 Pt per Correct Answer)

Mark **Yes** if limitations are present for the following, **No** if not.

Yes No

- ☐ ☐ 1. Houses with Basements
- ☐ ☐ 2. Septic Tank Absorption Fields
- ☐ ☐ 3. Local Roads, Streets and Driveways

Possible Points	Official Score
Part I - 50	_____ of 50
Part II - 14	_____ of 14
Part III - 7	_____ of 7
Part IV - 26	_____ of 26
Part V - 3	_____ of 3
TOTAL - 100	_____ of 100

Team Name _____

Team No. _____

Contestant Name _____

Contestant No. _____

Pit No. _____

Div: Sr/Jr/4H