PURDUE UNIVERSITY | Extension

Indiana Soil Evaluation Scorecard

4-H-394-W **AGRICULTURE**

I. SOIL PROPERTIES *(5 points each, 45 total)*

A. PARENT MATERIAL

1 Weathered bedrock
2 Till
3 Outwash/Lacustrine deposits
4 Eolian sand
5 Loess
6 Alluvium
7 Local overwash

B. SLOPE

1 0-2%
2 3-6%
3 7-12%
4 13-18%
5 19-25%
6 26-35%
7 >35%

C. LANDFORM

1 Upland hillslope
2 Upland swell
3 Upland flat
4 Upland depression
5 Outwash/Lacustrine hillslope
6. Outwash/Lacustrine swell
7 Outwash/Lacustrine flat
8 Outwash/Lacustrine depression
9 Dune
10 Flood plain
11 Filled depression

D. SURFACE SOIL COLOR GROUP

1 Gray
2 Brown
3 Black

E. PREVIOUS EROSION

1 None to slight
2 Moderate
3 Severe

F. SURFACE TEXTURE

1 Sandy
2 Moderately sandy
3 Medium
4 Moderately clayey
5 Clayey

G. SUBSOIL TEXTURE

1 Sandy
2 Moderately sandy
3 Medium
4 Moderately clayey
5. Clayey

H. NATURAL SOIL DRAINAGE

1 Poorly
2 Somewhat poorly
3 Moderately well
4 Well

I. LIMITING LAYER

1 Bedrock, 0-20 in
2 Bedrock, 21-40 in
3 Dense till, 0-20 in
4 Dense till 21-40 in
5 Fragipan, 0-20 in
6 Fragipan, 21-40 in
7 Coarse sand & gravel, 0-20 in
8 Coarse sand & gravel, 21-40 in
9 None within 40 in

II. AGRICULTURE PRACTICES *(3 points each, 69 total)*

A. LAND USE OVERVIEW

1 Restore original vegetation to:
A – Wetland; **B** – Prairie; **C** – Mesic forest

	Yes	No	
2	A	B	Prime farmland

B. EROSION AND COMPACTION POTENTIALS

3	A	B	High for erosion by water
4	A	B	High for erosion by wind
5	A	B	High for soil compaction

C. BUFFERS AND COVER CROPS

6	A	B	Grassed waterways
7	A	B	Windbreaks
8	A	B	Filter strips

9 Most significant benefit of cover crops:
A - Scavenge N; **B** – No need; **C** – Erosion control

D. CROPPING PRACTICES

	Yes	No	
10	A	B	Timber stand improvement (TSI)
11	A	B	Permanent pasture
12	A	B	Crop rotation

E. TILLAGE PRACTICES

13	A	B	No till
14	A	B	Moldboard or chisel plowing

F. WATER MANAGEMENT

15	A	B	Drainage
16	A	B	Irrigation
17	A	B	Terraces

G. PLANT NUTRIENT APPLICATION

		A	B	C
18	N:	Low	Med.	High
19	P:	Add	None	Deplete
20	K:	Add	None	Deplete
21	Lime:	Add	None	

H. NUTRIENT POLLUTION POTENTIAL

22 Nitrogen pollution potential:
A – High, groundwater; **B** – High, surface water; **C** – Med.

23 Phosphorus pollution potential:
A – High; **B** – Medium; **C** – Low

Team / Contestant number: _____

Contestant name: _____

School / Club name: _____

Site number: _____

SCORE

Part I (45 points possible): _____

Part II (69 points possible) _____

Total (114 points possible): _____