

Iowa Soil Judging Scorecard

Contestant Name _____ Contestant Number _____

School Name _____ Soil Site Number _____

See Soil Judging in Iowa, CROP 3168A, for interpretation of this form. Mark only one box per question.

PART I. SURFACE FEATURES 2 POINTS

1. LANDSCAPE POSITION

- Upland a
- Intermittent drainageways b
- Footslope c
- Terrace d
- Floodplain e

2. SLOPE

- Nearly level, 0-2% a
- Gently sloping, 2-5% b
- Moderately sloping, 5-9% c
- Strongly sloping, 9-14% d
- Steep, greater than 14% e

PART I TOTAL

PART II. SOIL FEATURES—THE PROFILE 17 POINTS

3. MOIST COLOR OF A1 OR AP

- Dark a
- Moderately dark b
- Light c
- Very light d

4. E HORIZON PRESENT

- Yes a
- No b

5. THICKNESS OF A HORIZON OR A+E HORIZONS

- Thick, more than 12" a
- Moderately thick, 7-12" b
- Moderately thin, 3-7" c
- Thin, less than 3" d

6. TEXTURE OF A HORIZON

- Coarse a
- Moderately coarse b
- Medium c
- Moderately fine d
- Fine e

7. B HORIZON PRESENT

- Yes a
- No b

8. C HORIZON PRESENT

- Yes a
- No b

9. MOIST COLOR OF B HORIZON (OR C HORIZON IF B IS ABSENT)

- Uniform brown or dark brown or strong brown a
- Uniform brown or dark brown or strong brown/includes olive or yellowish or reddish cast or tints or other redox features b
- Grayish brown or olive gray, no redox features c
- Grayish brown or olive gray with gray or rust redox features d
- Gray with redox features e
- Uniform gray f
- Black g

10. TEXTURE OF B HORIZON (OR C HORIZON IF B IS ABSENT OR BURIED A IF 24" OVERWASH)

- Coarse a
- Moderately coarse b
- Medium c
- Moderately fine d
- Fine e

PART II. CONTINUED

11. SOIL STRUCTURE OF SURFACE HORIZON

- Granular a
- Blocky b
- Prismatic c
- Platy d
- Structureless e

12. STRUCTURE OF THE B HORIZON (OR IF C IS ABSENT)

- Granular a
- Blocky b
- Prismatic c
- Platy d
- Structureless (massive or single grained) e

13. SOIL ORDER (CURRENT)

- Vertisol a
- Mollisol b
- Alfisol c
- Inceptisol d
- Entisol e

14. SOIL PARENT MATERIAL—CAN MARK 2

- Glacial till or local sediments from glacial till a
- Loess b
- Alluvium or colluvium c
- Residuum d

15. NATIVE VEGETATION

- Transition a
- Prairie b
- Forest c

16. SURFACE DRAINAGE

- Rapid a
- Medium b
- Slow c
- Ponded d

17. INTERNAL DRAINAGE

- Excessively drained a
- Well drained b
- Moderately well drained c
- Somewhat poorly drained d
- Poorly or very poorly drained e

18. EROSION CLASS

- Overwash a
- Uneroded or slightly eroded b
- Moderately eroded c
- Severely eroded d
- Gullied land e

19. CALCAREOUS SURFACE SOIL

- Yes a
- No b

20. STONINESS OR ROCKINESS

- Yes a
- No b

PART II TOTAL

PART III. LAND CAPABILITY CLASSIFICATION AND PRODUCTIVITY POTENTIAL 4 POINTS

21. LAND CAPABILITY CLASS

- I. Few limitations a
- II. Some limitations b
- III. Severe limitations c
- IV. Very severe limitations d
- V. Noncropland e
- VI. Unsuitable for cultivation f
- VII. Restricted for agriculture g
- VIII. Nonagricultural h

22. LAND CAPABILITY

- None a
- Subclass: e erosion b
- w wetness c
- s soil d
- c climate e

23. PRODUCTIVITY POTENTIAL

- High a
- Medium b
- Low c
- Unsuited d

PART III TOTAL

PART IV. EVALUATION OF MANAGEMENT PRACTICES 7 POINTS

Practices to maintain or improve soil

24. SURFACE DRAINAGE

- Yes a
- No b

25. SUBSURFACE DRAINAGE

- Yes a
- No b

26. GRASS WATERWAY

- Yes a
- No b

27. CONTOURING

- Yes a
- No b

28. STRIP CROPPING

- Yes a
- No b

29. TERRACING

- Yes a
- No b

30. COVER CROP

- Yes a
- No b

PART IV TOTAL

PART V. SUITABILITY OF SOILS FOR NONAGRICULTURAL USES 10 POINTS

Limitations for building sites for houses with basements and septic systems

31. BEDROCK

- Suitable a
- Not suitable b

32. EVIDENCE OF WATER TABLE

- Suitable a
- Not suitable b

33. FLOODING

- Suitable a
- Not suitable b

34. SHRINK-SWELL

- Suitable a
- Not suitable b

Soil Health

35. ROOTING OR COMPACTION

- a b c

36. AGGREGATE STABILITY

- a b c

37. STRUCTURE OF A

- a b c

Limitations of topsoil

38. TEXTURE GROUP

- Suitable a
- Not Suitable b

39. THICKNESS OF A HORIZON

- Suitable a
- Not Suitable b

40. EVIDENCE OF WATER TABLE

- Suitable a
- Not Suitable b

PART V TOTAL

SCORING SUMMARY

PART I

PART II

PART III

PART IV

PART V

TOTAL SCORE