Land Judging Score Card

Part Two: Conservation Practices

LAND JUDGING SCORE CARD

Name . . . . . Field No. . . . . .

Indicate your answer by an X in the ☐

LAND CHARACTERISTICS - PART ONE

SURFACE TEXTURE
- Sandy . . . . . ☐
- Loamy . . . . . ☐
- Clayey . . . . . ☐
- (Organic) . . . . . ☐

ORGANIC MATTER (SURFACE SOIL)
- High . . . . . ☐
- Medium . . . . . ☐
- Low . . . . . ☐

THICKNESS OF ROOTING ZONE
- Thin . . . . . ☐
- Thick . . . . . ☐
- Very Thick . . . . . ☐

MOVEMENT OF AIR AND WATER IN THE SOIL (PERMEABILITY)
- Rapid . . . . . ☐
- Moderate . . . . . ☐
- Slow . . . . . ☐

SLOPE
- A Nearly level . . . . . ☐
- B Gently sloping . . . . . ☐
- C Moderately sloping . . . . . ☐
- D Strongly sloping . . . . . ☐
- E Steep . . . . . ☐
- F Very steep . . . . . ☐

EROSION - WIND AND WATER
- None to slight . . . . . ☐
- Moderate . . . . . ☐
- Severe . . . . . ☐
- Very severe . . . . . ☐

DRAINAGE
- Poor . . . . . ☐
- Somewhat poor . . . . . ☐
- Moderately well or well . . . . . ☐
- Excessive . . . . . ☐

FACTORS DETERMINING LAND CLASS
- Texture . . . . . ☐
- Organic matter . . . . . ☐
- Thickness of rooting zone . . . . . ☐
- Permeability . . . . . ☐
- Slope . . . . . ☐
- Erosion . . . . . ☐
- Drainage . . . . . ☐

LAND CAPABILITY CLASS
I II III IV V VI VII VIII

Circle one of the above

SOIL ORDER
- Alfisol . . . . . ☐
- Aridisol . . . . . ☐
- Entisol . . . . . ☐
- Histosol . . . . . ☐
- Inceptisol . . . . . ☐
- Mollisol . . . . . ☐
- Oxisol . . . . . ☐
- Spodosol . . . . . ☐
- Ultisol . . . . . ☐
- Vertisol . . . . . ☐

CONSERVATION PRACTICES - PART TWO

VEGETATIVE

Use soil conserving and improving crops:

- ☐ 1. Every year between cash crops.
- ☐ 2. Every other year.
- ☐ 3. Two years out of three.
- ☐ 4. Three years out of four.

- ☐ 5. Contour strip cropping.
- ☐ 6. Manage crop residue.
- ☐ 7. Use sod-based rotation.
- ☐ 8. Wind strip cropping.
- ☐ 9. Use field windbreaks.
- ☐ 10. Control noxious plants.
- ☐ 11. Establish recommended grasses and/or legumes.
- ☐ 12. Manage pasture or range properly.
- ☐ 13. Protect from wildfire.
- ☐ 14. Plant recommended trees.
- ☐ 15. Harvest trees selectively.
- ☐ 16. Use for wildlife or recreational area.
- ☐ 17. . . . . .

MECHANICAL

- ☐ 18. Terrace.
- ☐ 19. Farm on the contour.
- ☐ 20. Maintain terraces.
- ☐ 21. Construct diversion terraces.
- ☐ 22. Develop waterways.
- ☐ 23. Install water control system.
- ☐ 24. Control gullies.
- ☐ 25. Subsoil.
- ☐ 26. . . . . .

FERTILIZER & SOIL AMENDMENTS

- ☐ 27. Lime.
- ☐ 28. Nitrogen.
- ☐ 29. Phosphorus.
- ☐ 30. Potassium.
- ☐ 31. One micronutrient.
- ☐ 32. Two or more micronutrients.
- ☐ 33 . . . . . .

SCORE PART I . . . . . .

SCORE PART II . . . . . .

TOTAL SCORE . . . . . .

Florida Cooperative Extension Service/Institute of Food and Agricultural Sciences/University of Florida, Gainesville

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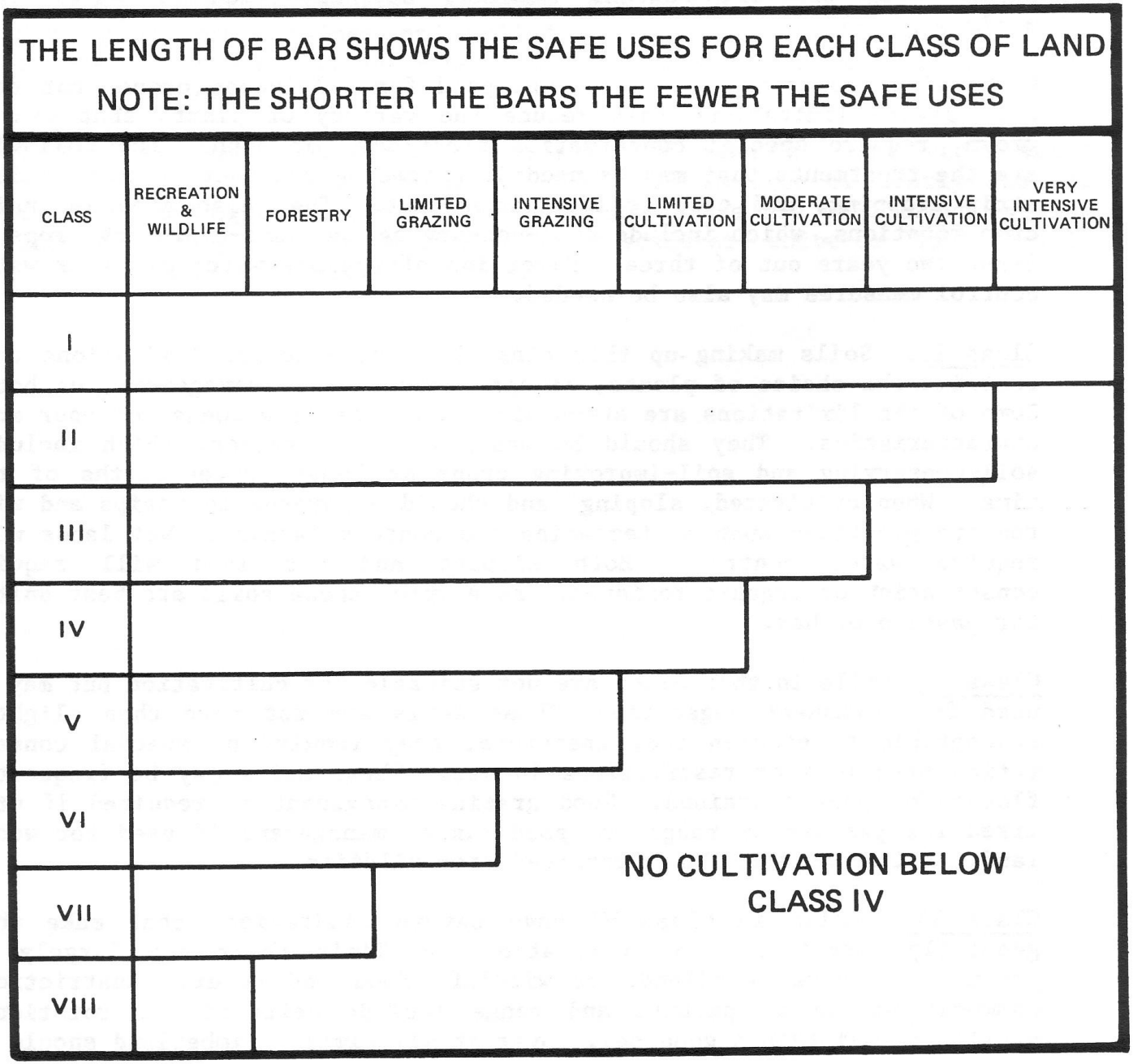
Conservation Practices

Part Two of the Land Judging Score Card deals with conservation practices. Local conditions may require some modifications of the following recommendations. Consult your County Extension Agent, SCS District Conservationist, or Vocational Agriculture Teacher.

Vegetative

Practices Number 1, 2, 3, and 4. Use soil-conserving and soil-improving crops -- Prevent or retard erosion, maintain or improve rather than deplete soil organic matter, improve soil structure and tilth, increase water intake, and increase fertility. Use of close-seeded crops and/or incorporation of green manure into the soil would help to achieve these results. Use crops that conserve and improve soil every year between cash crops on Class I land. Use them every other year on Class II land. Use them two years out of three on Class III land. Use them three years out of four on Class IV land.

LAND CLASSES AND SAFE LAND USES



CLASS I: "…every year between cash crops…"

- Summer: Row crop
- Winter: Cover Crop
- Summer: Row Crop
- Winter: Cover Crop
- Summer: Row Crop
- Winter: Cover Crop
- Summer: Row Crop
- Winter: Cover Crop

CLASS II: "…every other year…"

- Summer: Row crop
- Winter: Cover Crop

- Summer: Cover Crop
- Winter: Cover Crop

- Summer: Row Crop
- Winter: Cover Crop

- Summer: Cover Crop
- Winter: Cover Crop

CLASS III: “…two years out of three…”

Summer: Row crop

Winter: Cover Crop

Summer: Cover Crop

Winter: Cover Crop

Summer: Cover Crop

Winter: Cover Crop

CLASS IV: "…three years out of four…"

- Summer: Row crop
- Winter: Cover Crop

- Summer: Cover Crop
- Winter: Cover Crop

- Summer: Cover Crop
- Winter: Cover Crop

- Summer: Cover Crop
- Winter: Cover Crop

Number 5. Contour strip cropping -- Grow row crops with strips or bands of close-growing cover crops in a systematic arrangement on the contour. Use on Classes II through IV where the slope is 2 percent or more, except where sandy soil extends from the soil surface to a depth of more than 20 inches.

Number 6. Manage crop residue -- Turn in rather than burn off crop residue, or provide a protective cover, leaving the residue of any previous crops as a mulch on the surface. Employ conservation tillage where feasible and consistent with overall farm management strategy. Use on Classes I through IV.

Number 7. Use sod-based rotation -- Grow crops in recurring succession on the same land using grass pasture three years out of four or six years out of eight. Use on Class IV.

Number 8. Wind strip cropping -- Produce row crops in long, relatively narrow strips between strips of tall growing grasses or legumes placed across the direction of the prevailing wind. Use on Classes I through IV when a wind erosion problem is indicated on the conditions poster.

Number 9. Use field windbreaks -- Use a border of trees and shrubs, usually three or more rows, to reduce the force of the wind for the protection of fields, orchards, groves, feedlots, and homesteads. Use on Classes I through IV when a wind erosion problem is indicated on the conditions poster.

Number 10. Control noxious plants -- Keep undesirable vegetation to a minimum. Mowing and spraying with chemicals are two methods of control. Use on Classes I through VII.

Number 11. Establish recommended grasses and/or legumes -- Establish a protective cover on land not producing suitable permanent vegetation or on unprotected land not suitable for cultivated crops. Use on Classes V and VI.

Number 12. Manage pasture or range properly -- Apply practices to keep plants growing actively over as long a period as possible, and encourage the growth of desirable grasses and legumes through controlled grazing and use of fertilizers and lime. Use on Classes V and VI.

Number 13. Protect from wildfire -- Self-explanatory. Use on Classes V through VIII.

Number 14. Plant recommended trees -- Use recommended varieties of trees for post lots and woodland plantings. Use on Class VII.

Number 15. Harvest trees selectively -- Remove mature or undesirable trees and encourage reproduction under the remaining stand. Use on Class VII.

Number 16. Use for wildlife or recreational area -- Protect or develop areas that are not suitable for cultivation, grazing, or forestry. Use on Class VIII.

MECHANICAL

- ☐ 18. Terrace.
- ☐ 19. Farm on the contour.
- ☐ 20. Maintain terraces.
- ☐ 21. Construct diversion terraces.
- ☐ 22. Develop waterways.
- ☐ 23. Install water control system.
- ☐ 24. Control gullies.
- ☐ 25. Subsoil.
- ☐ 26. . . . . .

Mechanical

Number 18. Terrace -- Use terraces, which are ridges or embankments of soil constructed across the slope, to control runoff, minimize erosion, and increase infiltration of water into the soil. Use on Class II through IV when slope is 2 or more percent but less than 8 percent, if surface texture is loamy or clayey.

Number 19. Farm on the contour -- Conduct field operations such as plowing, planting, and cultivation on the contour (i.e., at right angles to the direction of slope), with or without the use of terraces and/or contour strip cropping. Use on Classes II through IV where the slope is 2 percent or more, except on excessively drained soils.

Number 20. Maintain terraces -- Keep terraces in shape to work effectively. Do not cultivate across them. Use with practices No. 18 and 21.

Number 21. Construct diversion terraces -- These are larger terraces constructed to handle a larger flow of water than a normal field terrace. Use when an upslope water problem is indicated on the conditions poster.

Number 22. Develop waterways -- Use natural or constructed courses to accommodate runoff from terraces and contoured land. Generally seeded to grass or hard-surfaced. Use with all terraced and/or contoured land (practices 18, 19, 20, 21, or 24).

Number 23. Install water control system -- Control water on land by means of surface or sub-surface drains and structures. Use where the rooting zone is thin or thick due to a seasonally or permanently high water table.

Number 24. Control gullies -- Prevent further erosion in gullies by grading the heads and sides of gullies, building temporary check dams, establishing perennial vegetation, constructing diversion terraces to divert water from the heads of gullies, and fencing out domestic animals. Use where gullies are present.

Number 25. Subsoil -- Till soil below the normal plow depth, sometimes referred to as chiseling. The intended purpose is to break or shatter a spodic horizon, claypan, or plowpan which has been limiting the rooting depth and/or impeding internal soil drainage. Use where a compaction problem is indicated on the conditions poster.

Most spodic horizons do NOT limit root growth, to my knowledge. This rule could be confusing. Look for changes to this.

FERTILIZER & SOIL AMENDMENTS

- ☐ 27. Lime.
- ☐ 28. Nitrogen.
- ☐ 29. Phosphorus.
- ☐ 30. Potassium.
- ☐ 31. One micronutrient.
- ☐ 32. Two or more micronutrients.
- ☐ 33 . . . . . .

Fertilizer and soil amendments

Use proven soil testing methods, fertilizer recommendations based upon research, and good production records as a basis for managing fertilizer and soil amendment applications. This approach to fertilization will conserve our resources and still maintain a highly productive soil.

The ratings given to soil tests indicate the level of productivity expected if a given nutrient were not applied to the soil as fertilizer, and the probability of crop response if the nutrient were applied. The following definitions are used by the IFAS Extension Soil Testing Laboratory to determine if phosphorus (P) or potassium (K) fertilizer should be recommended. These definitions assume that no other factor, such as water, will limit growth.

Very Low.....Less than 50 percent of crop yield potential is expected without addition of the nutrient. Yield increase in response to added nutrient is always expected.

Low.....50 to 75 percent of crop yield potential is expected without addition of the nutrient. Yield increase in response to added nutrient is expected.

Medium.....75 to 100 percent of crop yield potential is expected without addition of the nutrient. Yield increase in response to added nutrient will probably occur if the test value is in the lower end of the range.

High.....Soil can supply sufficient quantities of the nutrient for the crop. Yield increase in response to added nutrient is not expected. Test again next year if the nutrient is not applied this year.

Very High.....Soil can supply the nutrient in far greater quantities than considered adequate. Yield increase in response to added nutrient is never expected. Addition of nutrient will be wasteful, could induce nutrient imbalance, and could decrease yields.

Number 27. Lime -- Apply agricultural limestone to reduce soil acidity (increase soil pH). Lime need is based upon the crop to be grown and soil test results. The interpretation of whether or not the crop will benefit from liming will be given on the conditions poster.

Number 28. Nitrogen -- Nitrogen (N) fertilizer will almost always be needed for non-legume crops grown on mineral soils. Soil testing is not used for guiding N fertilizer recommendations in Florida. Mark N on the score card if the conditions poster lists N as deficient.

Number 29. Phosphorus *-- Addition of P fertilizer is a recommended practice when soil test levels are rated very low (soil test shows <10 ppm Mehlich-I extractable P in topsoil), low (10-15 ppm P), or medium (16-30 ppm P) (mark P on the score card); but is not recommended when the tests are rated high (31-60 ppm P) or very high (>60 ppm P) (do not mark P on the score card). Florida soils range from very low to very high in P. Soil testing is a useful tool in determining the need for P fertilization.*

Number 30. Potassium *-- Addition of K fertilizer is a recommended practice when soil test levels are very low (soil test shows <20 ppm Mehlich-I extractable K in topsoil), low (20-35 ppm K), or medium (35-60 ppm K) (mark K on the score card); but is not usually recommended when tests are high (61-125 ppm K) or very high (>125 ppm K) (do not mark K on the score card). Potassium leaches in sandy soils and thus must be managed differently on sands than on finer-textured soils. Build-up of K is not practical on most Florida sands.*

See SL129

Number 31. and 32. Micronutrients -- The nutrient elements manganese (Mn), zinc (Zn), copper (Cu), iron (Fe), boron (B), and molybdenum (Mo) are required by plants in very small quantities. A deficiency of any one of these micronutrients will result in reduced plant performance. Tests are helpful, but experience with the soil and crop are also important in determining if one or more of the micronutrients should be added as fertilizer. Mark No. 31 on the score card if only one of the micronutrients is listed on the conditions poster as deficient. Mark No. 32 on the score card if two or more are listed as deficient.

CONDITIONS OF FIELDS FOR LAND JUDGING
FIELD NO. _____

Assume that the following interpretations of farm records and soil tests have been made for the crop to be grown:

1. **Thickness of the surface soil was _____.**
2. **Other conditions are:**
   - **Base saturation = _____.**
   - Upslope water problem?_____.
   - Wind erosion hazard?_____.
   - Range of depths to wet-season water table?_____.
   - Compaction problem?_____.
   - Gullies present?_____.
   - Other?_____
3. **Pay no attention to current practices on this field.**
4. **Consider the most intensive use of the land.**
5. **The crop _____ (will, will not) benefit from reduction of soil acidity.**
6. **Phosphorus soil test is rated as _____.**
7. **Potassium soil test is rated as _____.**
8. **The following nutrients will be deficient for the crop to be grown:**

   _____, _____, _____, _____, _____.

Note: Items in **red (bold)** *must* be shown on conditions poster. Items in green (not bold) *may or may not* be shown, at discretion of contest officials.

LAND JUDGING SCORE CARD

Name RANDY BROWN Field No. 2

Indicate your answer by an X in the ☐

LAND CHARACTERISTICS - PART ONE

SURFACE TEXTURE

- ☒ Sandy
- ☒ Loamy
- ☐ Clayey
- ☐ (Organic)

II 0

ORGANIC MATTER (SURFACE SOIL)

- ☐ High
- ☐ Medium
- ☒ Low

I 3

THICKNESS OF ROOTING ZONE

- ☐ Thin
- ☒ Thick
- ☐ Very Thick

II 3

MOVEMENT OF AIR AND WATER IN THE SOIL (PERMEABILITY)

- ☒ Rapid
- ☒ Moderate
- ☐ Slow

II 0

SLOPE

- ☐ A Nearly level
- ☐ B Gently sloping
- ☒ C Moderately sloping
- ☐ D Strongly sloping
- ☐ E Steep
- ☐ F Very steep

III 3

EROSION - WIND AND WATER

- ☐ None to slight
- ☒ Moderate
- ☐ Severe
- ☐ Very severe

II 3

DRAINAGE

- ☐ Poor
- ☒ Somewhat poor
- ☐ Moderately well or well
- ☐ Excessive

II 3

FACTORS DETERMINING LAND CLASS

- ☒ Texture
- ☐ Organic matter
- ☒ Thickness of rooting zone
- ☒ Permeability
- ☒ Slope
- ☒ Erosion
- ☒ Drainage

0

LAND CAPABILITY CLASS

I II III (IV) V VI VII VIII 6

Circle one of the above

SOIL ORDER

Alfisol	☐	Mollisol	☐
Aridisol	☐	Oxisol	☐
Entisol	☒	Spodosol	☐
Histosol	☐	Ultisol	☐
Inceptisol	☒	Vertisol	☐

0

CONSERVATION PRACTICES - PART TWO

VEGETATIVE

Use soil conserving and improving crops:

- ☐ 1. Every year between cash crops.
- ☐ 2. Every other year.
- ☐ 3. Two years out of three.
- + ☒ 4. Three years out of four.
- − ☒ 5. Contour strip cropping.
- + ☒ 6. Manage crop residue.
- ☐ 7. Use sod-based rotation.
- ☐ 8. Wind strip cropping.
- ☐ 9. Use field windbreaks.
- + ☒ 10. Control noxious plants.
- ☐ 11. Establish recommended grasses and/or legumes.
- ☐ 12. Manage pasture or range properly.
- ☐ 13. Protect from wildfire.
- ☐ 14. Plant recommended trees.
- ☐ 15. Harvest trees selectively.
- ☐ 16. Use for wildlife or recreational area.
- ☐ 17. .....

MECHANICAL

- − ☒ 18. Terrace.
- + ☒ 19. Farm on the contour.
- − ☒ 20. Maintain terraces.
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- ☐ 25. Subsoil.
- ☐ 26. .....

FERTILIZER & SOIL AMENDMENTS

- + ☒ 27. Lime.
- + ☒ 28. Nitrogen.
- − ☒ 29. Phosphorus.
- + ☒ 30. Potassium.
- + ☒ 31. One micronutrient.
- ☐ 32. Two or more micronutrients.
- ☐ 33 .....

SCORE PART I 21

SCORE PART II 15

TOTAL SCORE 36

LAND JUDGING SCORE CARD

Name _____ Field No. _____

0 1 2 3 4 5 6 7 8 9	TEAM NO.	
0 1 2 3 4 5 6 7 8 9		
0 1 2 3 4 5 6 7 8 9		
1 2 3 4	INDIVIDUAL NUMBER	
1 2 3 4	FIELD NUMBER	
■ 2 3 4	LAND JUDGING - PART 1	LJ1

Indicate your answer by filling in the rectangle completely(■).

IMPORTANT: Use #2 Pencil - Erase Completely to Change

Florida Cooperative Extension Service
Institute of Food and Agricultural Sciences
University of Florida, Gainesville

LAND CHARACTERISTICS - PART ONE

SURFACE TEXTURE	☐ Sandy ☐ Loamy ☐ Clayey ☐ (Organic)
ORGANIC MATTER (Surface Soil)	☐ High ☐ Medium ☐ Low
THICKNESS OF ROOTING ZONE	☐ Thin ☐ Thick ☐ Very Thick
MOVEMENT OF AIR AND WATER IN THE SOIL(Permeability)	☐ Rapid ☐ Moderate ☐ Slow
SLOPE	☐ A. Nearly level ☐ B. Gently sloping ☐ C. Moderately sloping ☐ D. Strongly sloping ☐ E. Steep ☐ F. Very Steep
EROSION - WIND AND WATER	☐ None to slight ☐ Moderate ☐ Severe ☐ Very severe
DRAINAGE	☐ Poor ☐ Somewhat poor ☐ Moderately well or well ☐ Excessive
FACTORS DETERMINING LAND CLASS	☐ Texture ☐ Organic matter ☐ Thickness of rooting zone ☐ Permeability ☐ Slope ☐ Erosion ☐ Drainage
LAND CAPABILITY CLASS	☐ I ☐ II ☐ III ☐ IV ☐ V ☐ VI ☐ VII ☐ VIII
SOIL ORDER	☐ Alfisol ☐ Aridisol ☐ Entisol ☐ Histosol ☐ Inceptisol ☐ Mollisol ☐ Oxisol ☐ Spodosol ☐ Ultisol ☐ Vertisol

SCORE PART 1	
SCORE PART 2	
TOTAL SCORE	

SCANTRON FORM NO. 31344-UF
Scantron asks that you please RECYCLE this product.

M9 0695-E4030-12 11 10 9 8 7 6 5 4 3 2 1

0	1	2	3	4	5	6	7	8	9	TEAM NO.	
0	1	2	3	4	5	6	7	8	9		
0	1	2	3	4	5	6	7	8	9		
	1	2	3	4	INDIVIDUAL NUMBER						
	1	2	3	4	FIELD NUMBER						
	1	■	3	4	LAND JUDGING - PART 2						LJ2

Indicate your answer by filling in the rectangle completely(■).

IMPORTANT: Use #2 Pencil - Erase Completely to Change

Florida Cooperative Extension Service
Institute of Food and Agricultural Sciences
University of Florida, Gainesville

CONSERVATION PRACTICES - PART TWO

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- ☐ 33. _____