LAND JUDGING AND HOMESITE EVALUATION IN FLORIDA

A workshop for 4-H

Land Judging Workshop 01-27-2010

Who am I?

Pedology Professor at UF IFAS rep and guide for Landjudging rexellis@ufl.edu

LORID

What is it? Local and State contest about making wise landuse decisions Who is it? Middle and High School (both FFA and 4-H) Who oversees it? State Land Judging Committee Who guides it? UF IFAS (Herbert → Brown → Ellis) More info? <u>http://landjudging.ifas.ufl.edu</u> (Edit: website changed to <u>http://landjudging.org</u> in February 2013)

ORID

My Goal for Today

- I want you to get excited about soils
- I want your students to get excited too.
- I want to see you and your students at the next state land judging contest!

How do you get to state?

- Win your county. That's it!
- In some counties, there is NO land judging contest because one or less teams want one.
- Under these circumstances, we currently permit ANY team from that county to go DIRECTLY to the state contest, provided they participate in a local contest in some other county.

You can go to state this YEAR!

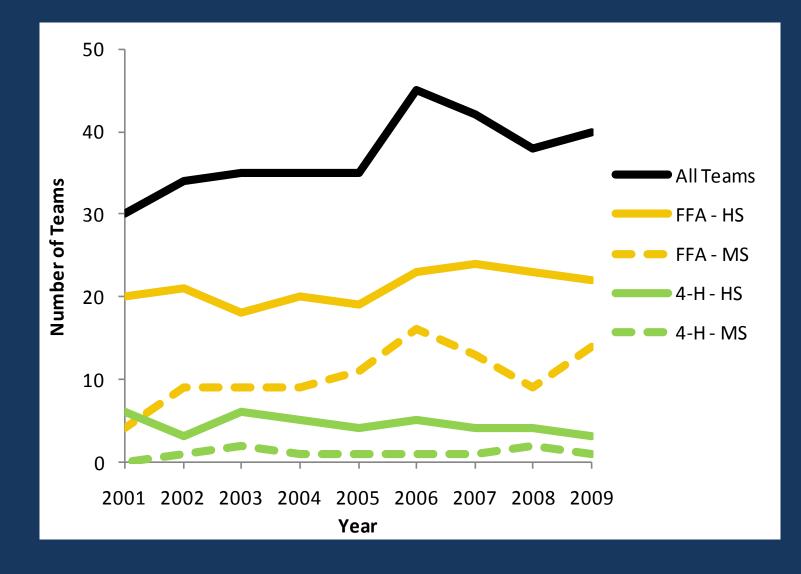
- If your county has NO 4-H team participating in land judging, then you can put together a team and attend neighboring local contest.
- Document your participation at the local level, then register for state!
- See you soon I hope.

You can go to nationals

- The FFA and 4-H winners of the state contest go to Nationals.
- It is a great experience.
- Do you want to go to the national contest?

Put together a 4-H team today!

Participation









Annual State of Florida 4H / FFA Land Judging Contest Information

Revised Training Material

Policy Statement (revised June 2006)

Past Contest Results

Future Contest Sites

Important

Scorecard Grading Policy

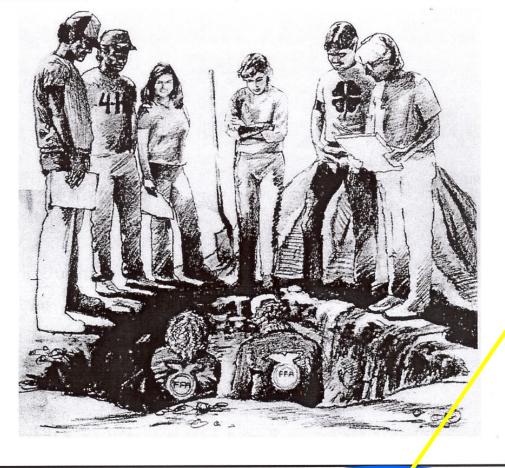


http://landjudging.ifas.ufl.edu/ **Training Material Click Picture to Download Download PDF**



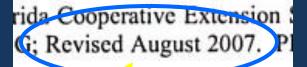
Land Judging and Homesite Evaluation in Florida¹

J.H. Herbert, Jr., R.B. Brown and E.A. Hanlon, Jr.²



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CIR 242

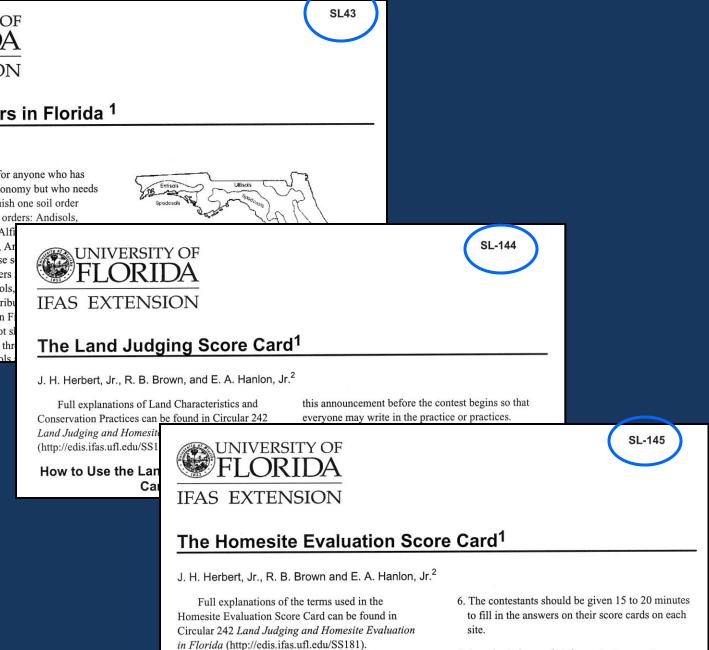


Key to Soil Orders in Florida ¹

M.E. Collins²

This fact sheet is intended for anyone who has some understanding of Soil Taxonomy but who needs a simplified key to help distinguish one soil order from another. There are 12 soil orders: Andisols,

Gelosols, Entisols, Inceptisols, Alfi Spodosols, Histosols, Mollisols, Ar and Oxisols. Only seven of these s present in Florida. The soil orders Florida are the Aridisols, Vertisols, Gelosols, and Oxisols. The distribu soil orders in Florida is shown in F Inceptisols, and Mollisols are not sl Alfisols are widely interspersed thr and the aerial extent of Inceptisols.



How to Use the Homesite Evaluation Score Card In order to insure that the contests are not lengthened too much by the addition of homesite evaluation, and that grading does not become too burdencome several alternatives are possible; for

HOMESITE EVALUATION SCORE CARD

Indicate your answer by an X in the \square

LAND CHARACTERISTICS - PART ONE SURFACE TEXTURE
Sandy
(Organic)
ORGANIC MATTER (SURFACE SOIL)
High
Medium.
Low
Thin
Thick
Very Thick
SOIL (PERMEABILITY)
Rapid
Moderate
SLOPE
A Nearly level
C Moderately sloping.
D Strongly sloping
E Steep.
F Very steep
EROSION - WIND AND WATER
None to slight
None to slight
Moderate
Moderate Severe Very severe
Moderate

ver by an X in the 🗆		
CONSERVATION PRACTICES - PART TWO VEGETATIVE Use soil conserving and improving crops: 1. Every year between cash crops. 2. Every other year.		
 A. Two years out of three. A. 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		
 28. Nitrogen. 29. Phosphorus. 30. Potassium. 31. One micronutrient. 		
 □ 32. Two or more micronutrients. □ 33		
SCORE PART I		
SCORE PART II		I
TOTAL SCORE		
	sion S cultur	al Sc

Site No											
	Indicate yo	ur answer by an X									
	PART TWO	PLANNED	USE AND INTERPR	RETATION							
	Degree of Limitation	Foundations	Lawns, Shrubs, Gardens	Septic Systems							
	Slight Moderate Severe V. Severe										
	Slight Moderate Severe V. Severe										
	Slight Moderate Severe V. Severe										
	Slight Moderate Severe V. Severe										
	Slight Moderate Severe V. Severe										
	Slight Moderate Severe V. Severe										
	Slight Moderate Severe V. Severe										
	Slight Moderate Severe V. Severe										
	Slight Moderate Severe V. Severe										
sion Service SCORE PART ONE cultural Sciences SCORE PART TWO resville TOTAL SCORE											

13

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LAND JUDGING SCORE CARD

Name

LAND CHARACTERISTICS SUBEACE TEXTURE

Indicate your answer by an X in the \Box

OONIGEDVAT

SOULAGE LEXIONE
Sandy
(Organic)
ORGANIC MATTER (SURFACE SOIL)
High
Medium
Low
THICKNESS OF ROOTING ZONE
Thin
Thick \ldots
Very Thick
MOVEMENT OF AIR AND WATER IN THE
SOIL (PERMEABILITY)
Rapid
Moderate
Slow
SLOPE
A Nearly level
B Gently sloping
C Moderately 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
Drainage
Circle one of the above
SOIL ORDER
Alfisol
Aridisol
Entisol
Histosol
Inceptisol Vertisol

CONSERVATION PRACTICES - PART TWO
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.
 G. Manage crop residue. 7. Use sod-based rotation. 8. Wind strip cropping. 9. Use field windbreaks. 10. Control noxious plants.
 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.
MECHANICAL
□ 19. Farm on the contour.
 20. Maintain terraces. 21. Construct diversion terraces.
 21. Construct diversion terraces. 22. Develop waterways.
 23. Install water control system. 24. Control gullies.
□ 24. Control guilles. □ 25. Subsoil.
□ 26
FERTILIZER & SOIL AMENDMENTS
27. Lime. 28. Nitrogen.

29. Phosphorus. □ 30. Potassium. 31. One micronutrient. □ 32. Two or more micronutrients.

SCORE PART I	X	•	•	•	•	•	•	e	•	2
SCORE PART II			2	•	•	•			•	2
TOTAL SCORE	•	•				•	•	•		

Soil Texture:

How do you determine texture? Feel the soil. Practice with known samples.

Slope:

How do you determine slope? Walk many slopes and calibrate yourself.

Water Table:

How do you determine depth to seasonal high water table? Redox concentrations in sand, redox depletions in loam/clay

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Indicate your answer by an X in the \Box

SURFACE TEXTURE
Sandy
Loamy
Clayey
(Organic)
ORGANIC MATTER (SURFACE SOIL)
High
Medium.
Low
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
None to slight
None to slight
None to slight Moderate Severe Very severe
None to slight
None to slight
None to slight. Moderate. Severe. Very severe DRAINAGE Poor Somewhat poor.
None to slight.
None to slight.
None to slight.
None to slight. Moderate. Severe. Very severe DRAINAGE Poor Somewhat poor. Moderately well or well Excessive FACTORS DETERMINING LAND CLASS Texture.
None to slight.
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 LAND CAPABILITY CLASS I III III IV V VI VII Circle one of the above SOIL ORDER
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 Slope Erosion Drainage LAND CAPABILITY CLASS I III Circle one of the above SOIL ORDER Alfisol
None to slight.
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 Slope Erosion Drainage LAND CAPABILITY CLASS I III Circle one of the above SOIL ORDER Alfisol

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. \square
- 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.

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.

FERTILIZER & SOIL AMENDMENTS □ 27. Lime. 28. Nitrogen. 29. Phosphorus. □ 30. Potassium. 31. One micronutrient. □ 32. Two or more micronutrients.

SCORE PART I .	•	•	•	•		e	•		
SCORE PART II.		•			•		•	•	
TOTAL SCORE .									

Everything else is memorization and execution.

Winning Teams...

In order of importance:

- 1. Know the book, front to back, in and out. They have it memorized ⁽³⁾
- 2. Walk LOTS of slopes. They can feel the slope just by walking it.
- 3. Call water tables correctly.
- 4. Know their soil textures.

In the field today we will focus on #3. It is the single most poorly understood part of the contest.

What will we do today?

- Visit some soil pits. Soil pits are the way we observe the land properties.
- At a pit, we will work through the score card to get a feel for what students will experience.
- Answer any questions you may have about the contest.
- Have fun and learn.