

PEDON 05

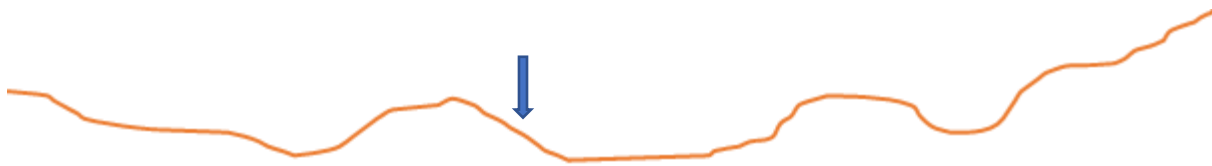
SITE INFORMATION

The site is in the Kleberg County, South Texas. The slope is 3%. The area is dominated by shrubs such as Brazilian blue wood, forbs, annuals, Kleberg's bluestem, and spiny hackberry. The elevation is ~210 ft.

LANDFORM

3% sloping of clay dune on sand sheet. The geomorphic setting is on a clay dune on a sand sheet on inland dissected coastal plain.

HILLSLOPE POSITION



SOIL MOISTURE AND TEMPERATURE REGIMES

Soil moisture regime is ustic and soil temperature regime is hyperthermic.

SOIL PIT INFORMATION

The soils in the areas are sandy eolian deposits derived from the sedimentary rock over loamy alluvium. The texture varies with depth. Clay films were not present throughout the profile. The Effervescence was strong to very strong on lower 5th and 6th horizons. Redox features were not present. The soils in the area are slightly alkaline. Visible secondary carbonate masses are present in the 5th (4%) and 6th horizon (25%).

CHARACTERIZATION DATA

| Horizon | pH | BS (%) | OC (%) | CCE | SAR |
|---------|-----|--------|--------|-----|-----|
| 1 | 7.7 | 97 | 0.8 | - | - |
| 2 | 7.2 | 100 | 0.6 | - | - |
| 3 | 7.1 | 100 | 0.4 | - | - |
| 4 | 7.6 | 100 | 0.2 | - | - |
| 5 | 8.5 | 100 | 0.1 | 9 | - |
| 6 | 8.4 | 100 | 0.1 | 15 | - |

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SITE IMAGE



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PROFILE IMAGE



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SCORECARD

SCORECARD
 VIRTUAL NATIONAL
 SOIL JUDGING
 CONTEST
 APRIL 5-16, 2021

| | | |
|--------------|-------|-------|
| 1. | _____ | _____ |
| 2. | _____ | _____ |
| 3. | _____ | _____ |
| 4. | _____ | _____ |
| 5. | _____ | _____ |
| Total | | |

Contestant: _____
 School: PRACTICE
 Pedon Number: 05

1. Soil Morphology

Score:

| Horizonation | | | | Boundary | | Texture | | | | | Color | | | Structure | | Cons. | Soil Features | | | Score | | |
|--------------|-------------|-------------|------------|--------------|-------|-------------|-------------|--------------------|-----------|-------------------|--------------|----------|-------|-----------|-------|-------|-------------------|-------|-------|-------|------|--|
| Master | | Sub. (5) | No. (5) | Dep. (cm) | Dist. | Sand (%) | Silt (%) | Clay (%) (5) | CF (%) | CF mod. (5) | Class (5) | Hue | Value | Chr. | Grade | Shape | Moist Strength | Redox | | Eff. | (35) | |
| Pre. (5) | Let. (5) | | | | | | | | | | | | | | | | | Depl. | Conc. | | | |
| | | | | 15 | C | 84 | 10 | | — | | | 10 YR | 3 | 2 | 1 | SOK | FR | — | — | — | | |
| | | | | 40 | C | 81 | 9 | | — | | | 10 YR | 2 | 1 | 2 | SOK | FR | — | — | — | | |
| | | | | 65 | C | 75 | 9 | | 1 | | | 10 YR | 3 | 2 | 2 | SOK | FR | — | — | — | | |
| | | | | 100 | C | 75 | 9 | | 2 | | | 10 YR | 4 | 3 | 2 | SOK | FR | — | — | — | | |
| | | | | 145 | C | 66 | 13 | | 5 | | | 10 YR | 4 | 4 | 2 | SOK | F1 | — | — | ST | | |
| | | | | 200+ | — | 56 | 21 | | 5 | | | 10 YR | 5 | 4 | 2 | ABK | EF1 | — | — | ✓ | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |

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2. Soil Profile Characteristics **Score:**

| Hydraulic Conductivity (10) | | Loading Rate at 75 cm (5) | Effective Soil Depth (5) | Water Retention Difference (5) | Soil Wetness Class (5) |
|--|---|---|--|---|--|
| Surface (5) ___ High ___ Mod. ___ Low | Limiting Layer (5) ___ High ___ Mod. ___ Low | ___ gpd/ft ² (3) Ref. (2) ___ | ___ V. shallow (<25 cm) ___ Shallow (25 to 49 cm) ___ Mod. deep (50 to 99 cm) ___ Deep (100 to 149 cm) ___ Very deep (≥150 cm) | ___ Very low (< 7.5 cm) ___ Low (7.5 to < 15 cm) ___ Mod. (15 to < 22.5 cm) ___ High (≥ 22.5 cm) | ___ (> 150 cm) ___ (100 to 150 cm) ___ (50 to 99 cm) ___ (25 to 49 cm) ___ (< 25 cm) |

3. Site Characteristics **Score:**

| Parent Material (GIVEN) | Landform (GIVEN) | Slope (GIVEN) | Slope Profile (5) | Surface Runoff (5) | Eros. Pot. (5) |
|-------------------------|------------------|-----------------|--|--|--|
| EOLIAN Alluvium | DUNES | 3% _b | ___ Summit ___ Shoulder ___ Backslope ___ Footslope ___ Toeslope ___ None | ___ Ponded ___ Very slow ___ Slow ___ Medium ___ Rapid ___ Very rapid | ___ Very Low ___ Low ___ Medium ___ High ___ Very High |

4. Soil Classification **Score:**

| Epipedon (5) | Subsurface horizons and/or diagnostic features (5 each) | Order (10) | Suborder (10) | Great Group (10) |
|--------------|---|------------|---------------|------------------|
| | | | | |

5. Interpretations **Score:**

| Houses with Basements (3) | Septic Tank Abs. Fields (3) | Local Roads and Streets (3) | Corn (3) | Hopyards (3) | Created Wetlands (3) |
|--|--|--|--|--|--|
| ___ Slight ___ Moderate ___ Severe | ___ Slight ___ Moderate ___ Severe | ___ Slight ___ Moderate ___ Severe | ___ Slight ___ Moderate ___ Severe | ___ Slight ___ Moderate ___ Severe | ___ Slight ___ Moderate ___ Severe |
| Reason # (2): ___ | Reason # (2): ___ | Reason (2): ___ | Reason (2): ___ | Reason (2): ___ | Reason (2): ___ |

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