2025 Region 5 Collegiate Soil Judging Contest University of Nebraska at Omaha

|  |  |  |
| --- | --- | --- |
| **SCORING** | | |
| **A.** |  |  |
| **B.** |  |  |
| **C.** |  |  |
| **D.** |  |  |
| **E.** |  |  |
| **Total:** |  |  |

|  |  |
| --- | --- |
| Team |  |
| Contestant |  |
| Site |  |
| Number of Horizons |  |
| Profile Depth (cm) |  |
| Nail Depth (cm) |  |

Sept. 28 – Oct. 3, 2025

1. **Site Characteristics Part A Score**

|  |  |  |  |
| --- | --- | --- | --- |
| **Landform (5)** | **Parent Material (5)\*** | **Slope (5)** | **Hillslope Position (5)** |
| Constructed | Alluvium | 0 to <2 % | Summit |
| Depression | Colluvium | 2 to <5 % | Shoulder |
| Floodplain | Eolian Sand | 5 to <9 % | Backslope |
| Terrace / Paleoterrace | Glacial Till / Outwash | 9 to <14 % | Footslope |
| Upland | Loess | 14 to <18 % | None |
|  | Residuum | 18 to <25 % |  |
|  |  | ≥25 % |  |

1. **Soil Morphology Part B Score**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Boundary** | | **Structure** | | **RMF** | | **Color** | | | **Texture** | | | | **Roots** | | **Efferv.** | **Horizonation** | | | | **Total** |
| Lower Depth | Dist. | Grade | Type | Conc. | Depl. | Hue | Value | Chroma | RFM | Class | %Clay | %Sand | Root  Abund. | Root  Size | Y/N | Prefix | Master | Suffix | No. | Total |
| 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 40 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

1. **Soil Hydrology and Profile Properties Part C Score**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Effective Soil Depth (5)** | **Hydraulic Conductivity (3-5-3)** | | **Surface Runoff (5)** | **Available Water Holding Capacity (5)** | **Soil Wetness Class (5)** |
| **Surface Layer** | **Limiting Layer** |
| Very Deep (≥ 150 cm) | Very High | Very High | Negligible or Ponded | Very Low (<7.5 cm) | Class 1 (≥ 150 cm) |
| Deep (100.1 to <150 cm) | High | High | Very Low | Low (7.5 to <15 cm) | Class 2 (100.1 to <150 cm) |
| Mod. Deep (50.1 to <100 cm) | Moderately High | Moderately High | Low | Medium (15.0 to <22.5 cm) | Class 3 (50.1 to <100 cm) |
| Shallow (25.1 to <50 cm) | Moderately Low | Moderately Low | Medium | High (≥ 22.5 cm) | Class 4 (25.1 to <50 cm) |
| Very Shallow (<25 cm) | Low | Low | High |  | Class 5 (<25 cm) |
|  | Very Low | Very Low | Very High |  |  |

1. **Soil Classification Part D Score**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Epipedon**  **(5)** | **Diagnostic Subsurface**  **Horizons & Characteristics (5)\*** | **Order (5)** | **Suborder (5)** | **Great Group (5)** | | **Particle-Size Control Section (5)** | **Family Particle**  **Size Class (5)\*** |
| Mollic | Abrupt textural change | Mollisol | Alboll | Arigalboll | \_\_\_\_Epiaquept | 0 cm to root limiting layer (limiting layer < 36 cm depth) | Sandy |
| Ochric | Albic | Alfisol | Aquoll | Calciaquoll | Endoaquept | Loamy |
| Umbric | Aquic conditions | Inceptisol | Udoll | Argiaquoll | Eutrudept | Upper 50 cm of argillic | Coarse Loamy |
| None | Argillic | Entisol | Aqualf | Epiaquoll | Dystrudept | Upper boundary of argillic to 100 cm (contrasting particle size class) | Fine Loamy |
|  | Calcic |  | Udalf | Endoaquoll | Psammaquent | Coarse Silty |
|  | Cambic |  | Aquept | Calciudoll | Fluvaquent | All of the argillic, where < 50 cm thick | Fine Silty |
|  | Lithic contact |  | Udept | Argiudoll | Epiaquent | 25-100 cm | Clayey |
|  | Lithologic discontinuity |  | Aquent | Hapludoll | Endoaquent | 25 cm to root limiting layer (36-100 cm depth) | Fine |
|  | Paralithic contact |  | Psamment | Albaqualf | Quartzipsamment | Very Fine |
|  | Secondary carbonates |  | Fluvent | Epiaqualf | Udipsamment |  | Sandy-skeletal |
|  | None |  | Orthent | Endoaqualf | \_\_\_\_Udifluvent |  | Loamy-skeletal |
|  |  |  |  | \_\_\_\_Hapludalf | Udorthent |  | Clayey-skeletal |
|  |  |  |  |  |  |  | Contrasting (any) |
| \*More than one may be present | |  |  |  |  |  |  |

1. **Site Interpretations Part E Score**

|  |  |  |
| --- | --- | --- |
| **Septic Tank Absorption Field (5)** | **Local Roads and Streets (5)** | **Dwellings with Basements (5)** |
| Slight | Slight | Slight |
| Moderate | Moderate | Moderate |
| Severe | Severe | Severe |
| Reason(s): | Reason(s): | Reason(s): |

V1.0 2025-8-18