# Major Land Resource Area 055C
# Southern Black Glaciated Plains

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## Ecological site keys

### Major Land Resource Area 55C

I. Run-off Landscape Position (Upland, normally convex short slopes)

A. Dig a hole to 20 inches & is there a root restricting layer within 10 inches of soil surface?

1 Yes - Very Shallow ... R055CY016SD – Very Shallow

2 No - Is there a root restricting layer within 10-20 inches of soil surface

i. No - Does the soil effervesce with acid (10% HCL) at or near (within 6 inches) of the surface

a. Yes - Thin Upland ... R055CY012SD – Thin Upland

b. No - See "Normal Landscape Site"

ii. Yes - What is the root restricting layer?

a. Gravel (greater than 15% by volume)-- Shallow to Gravel ... R055CY014SD – Shallow To Gravel

b. Bedrock (siltstone, shale, mudstone, sandstone, etc.)

1) Soil effervesces with acid (10% HCL) within 6 inches of the soil surface. ... R055CY024SD – Shallow Limy

2) The soil does not effervesce with acid within 6 inches of the soil surface and the soil texture is in the Clayey family particle size. ... R055CY017SD – Shallow Clay

II. Normal Landscape Position (Upland, slopes normally linear, except sandy/sands sites can have complex slopes)

A. Dig a hole to 20 inches & is there a claypan (columnar structure) within 16 inches of the surface?

1 Yes - See "Other Landscape Position"

2 No - What is the surface and subsoil texture? Clay, Silty Clay (>55% clay) Surface with clayey subsoil

i. Yes - Dense Clay ... R055CY018SD – Dense Clay

ii. No - What is the surface and subsoil texture? Clay, Silty Clay (40-55% clay) or Loamy Surface with clayey subsoil.

a. Yes - Clayey ... R055CY011SD – Clayey

b. No - What is the surface and subsoil texture? Loam, Silt Loam, Silty Clay Loam, Clay Loam, Sandy Clay Loam, Very Fine Sandy Loam

1) Yes - Loamy ... R055CY010SD – Loamy

2) No -What is the surface and subsoil texture? Sandy Loam, Fine Sandy Loam, Loamy Very Fine Sand

a) Yes - Sandy ... R055CY009SD – Sandy

b) No - What is the surface and subsoil texture? Sand, Loamy Sand, Loamy Fine Sand

(1) Yes - Sands ... R055CY008SD – Sands

III. Run-in Landscape Position (Floodplain, Drainageways, etc., except depressions)

A. Observe the soil profile to a depth of 60 inches. Is there evidence of a permanent water table (water table that persists longer than the wettest part of the growing season typically until the month of August) within 0-2 feet of the surface and the site dominated by hydrophytes?

1 Yes - Are there visible salts (including sodium & gypsum) within 16 inches of the surface?

i. Yes - Saline Lowland ... R055CY007SD – Saline Lowland

ii. No - Linear Meadow ... R055CY002SD – Linear Meadow

2 No - Is there evidence of a permanent water table (water table that persists longer than the wettest part of the growing season typically until the month of August) within 2 to 5 feet of the surface?

i. Does the soil effervesce with acid (10% HCL) at or near (within 6 inches) the surface?

a. No - Subirrigated ... R055CY003SD – Subirrigated

b. Are there visible salts (including sodium & gypsum) within 16 inches of the surface?

1) Yes - Saline Subirrigated ... R055CY036SD – Saline Subirrigated

2) No - Limy Subirrigated ... R055CY006SD – Limy Subirrigated

ii. No - Does water flow into and over/through the site?

a. No - "See Other Landscape Position"

b. Yes - Does it have flooding frequency?

1) Yes - Loamy Floodplain ... R055CY040SD – Loamy Floodplain

2) No-- What is the soil texture?

a) Loam, Silt Loam, Silty Clay Loam, Clay Loam, Sandy Clay Loam, Very Fine Sandy Loam-- Loamy Overflow ... R055CY020SD – Loamy Overflow

b) Clay, Silty Clay (40-55% clay) or Loamy Surface with clayey subsoil-- Clayey Overflow ... R055CY021SD – Clayey Overflow

IV. Other Landscape Position (Basin, Depression, Run-off and/or Run-in)

A. Does the soil have a claypan (columnar structure) within 16 inches of the surface?

1 Yes - Is it a closed depression?

i. No - Is there a claypan (columnar structure) within 4 inches of the surface?

a. Yes - Thin Claypan ... R055CY015SD – Thin Claypan

b. No - Claypan ... R055CY013SD – Claypan

ii. Yes - Closed Depression ... R055CY019SD – Closed Depression

2 No - Is the area in a basin or closed depression with no outlet

i. No - Rethink your position and start again

ii. Yes - Does the site pond water for 4 to 8 weeks in the spring or after heavy rain and have a high organic matter content?

a. Yes - Wet Meadow ... R055CY004SD – Wet Meadow

b. No - Does the site pond water until early summer and have a high organic matter content?

1) Yes - Shallow Marsh ... R055CY001SD – Shallow Marsh

2) No - Does the site pond water year round in most years and have high organic matter content?

a) Yes - Deep Marsh ... R055CY037SD – Deep Marsh

b) No - All other closed depressions or basins that pond water briefly after snowmelt or heavy rain or abnormally wet years.

(1) Yes - Closed Depression ... R055CY019SD – Closed Depression