

# Major Land Resource Area 102A Rolling Till Prairie

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## Ecological site keys

### RUN-OFF Landscape Positions (upland, normally convex short slopes)

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#### A Dig a hole to a depth of 20 inches

##### B. Is it organic?

Yes See MLRA Key "Other Landscape Positions"

No Is there a root restricting layer within 10 inches of soil surface?

Yes Very Shallow ... R102AY016SD – Very Shallow

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

Yes Gravel? (greater than 15% by volume)

Yes ... R102AY014SD – Shallow Gravel

No Bedrock (siltstone, sandstone, mudstone, etc)?

Yes Shallow Loamy ... R102AY024SD – Shallow Loamy

No Does the soil effervesce with acid (10% HCL) at or near (within 6 inches) the surface?

Yes Thin Upland ... R102AY012SD – Thin Upland

No See MLRA Key "Normal Landscape Positions"

### NORMAL Landscape Positions (Upland, slopes normally linear, except sandy/sands sites can have complex slopes)

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#### A. Dig a hole to a depth of 20 inches

##### B. Is it Organic?

Yes See MLRA Key "Other Landscape Positions"

No Are there visible salts (including sodium and gypsum) within 16 inches or a claypan of the surface?

Yes Is there a claypan (columnar structure) within 16 inches of the surface?

Yes See MLRA Key "Other Landscape Positions"

No What is the surface and subsoil texture?

C. Clay, Silty Clay (>40% clay) or Loamy Surface with Clayey subsoil

Yes Clayey ... R102AY011SD ... R102AY011SD – Clayey

No Loam, Silt loam, Silty clay loam, Clay loam, Sandy clay loam, very fine sandy loam

Yes Loamy ... R102AY010SD ... R102AY010SD – Loamy

No Sandy loam, Fine sandy loam, Loamy very fine sand

Yes Sandy ... R102AY009SD ... R102AY009SD – Sandy

No Sand, Loamy sand, Loamy fine sand

Yes Sands ... R102AY008SD ... R102AY008SD – Sands

## **RUN-IN Landscape Positions (Floodplain, Drainageways, etc., except depressions)**

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**A. Dig hole to a depth of 20 inches**

**B. Is it organic?**

Yes See MLRA Key "Other Landscape Positions"

No Observe the soil profile to a depth of 60 inches.

**C. Is there evidence of a permanent water table within 0-2 feet of the surface and the site dominated by hydrophytes?**

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

Yes Saline Lowland ... R102AY007SD ... R102AY007SD – Saline Lowland

No Linear Meadow ... R102AY002SD ... R102AY002SD – Linear Meadow

No Is there evidence of a permanent water table within 2 to 5 feet of the surface?

Yes Does the soil effervesce with acid at or near the surface or have visible salt (including sodium and gypsum) crystals within 6 inches?

No Subirrigated ... R102AY003SD ... R102AY003SD – Subirrigated

Yes Salts within 16 inches?

Yes Saline Subirrigated ... R102AY036SD ... R102AY036SD – Saline Subirrigated

No Limy Subirrigated ... R102AY006SD ... R102AY006SD – Limy Subirrigated

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

No See MLRA Key "Other Landscape Positions"

Yes Does it have a flooding frequency?

Yes Loamy Floodplain ... R102AY040SD ... R102AY040SD – Loamy Floodplain

No What is the surface texture of the soil?

**D. Clay, Silty Clay**

Yes Clayey Overflow ... R102AY021SD ... R102AY021SD – Clayey Overflow

No Loamy Overflow ... R102AY020SD ... R102AY020SD – Loamy Overflow

## **OTHER Landscape Positions (Basin, Depression, Run-off and/or Run-in)**

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**A. Dig hole to a depth of 20 inches**

**B. Is it organic?**

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

**No Shallow Peatland ... R102AY039SD – Shallow Peatland**

**Yes Calcareous Fen ... R102AY038SD – Calcareous Fen**

**No Does the soil have a claypan (columnar structure) within 16 inches?**

**Yes Is the claypan within 6 inches of the surface**

**Yes Not in MLRA 102A**

**No Claypan ... R102AY013SD – Claypan**

**No Is the area in a basin or closed depression with no outlet?**

**No Re-think your position and start again!**

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

**Yes Wet Meadow ... R102AY004SD – Wet Meadow**

**No Does the site pond water until early summer and have high organic matter content?**

**Yes Shallow Marsh ... R102AY001SD – Shallow Marsh**

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

**Yes Deep Marsh ... R102AY037SD – Deep Marsh**