Soil Management in the RM of Killarney – Turtle Mountain

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Glacial till

Lacustrine

Fluvial
Ryerson Association, developed on glacial till

Well or moderately well drained

Imperfectly or poorly drained

Hathaway  Medora  Ryerson  Coatstone  Ewart (Gt3)  Drokan (Gt2)
Waskada Association, developed on lacustrine over glacial till

Well drained

Imperfectly drained

Waskada

Glenlorne

Eluviated horizon

Two Creeks

Montgomery
Orthic Black Chernozems on fluvial materials

Bede

Dromore
Soil texture in A horizon

Percentage of total samples

LCS LMS CSL MSL FSL L SiL SCL SiCL CL SiC C
Chemical properties in A horizon

(Ryerson association, glacial till)
Soil properties in A horizon

(Ryerson association, glacial till)

Cropping land

Grazing land
A horizon depth by land use

(Ryerson association, glacial till)
Chemical properties in A horizon
(Waskada association, lacustrine over till)

Cropping land

Grazing land
A horizon depth by land use

(Waskada association, lacustrine over till)
Considerations in soil management

- Rego Black Chernozems on well drained soils: Hathaway or Maskawata
  - Reduced or zero-till
Considerations in soil management

- Rego Black Chernozems on well drained soils, Hathaway or Maskawata
  - Reduced or zero-tillage
  - Crop rotation
  - Organic matter buildup
Considerations in soil management (cont.)

- Soils on imperfectly or poorly drained conditions: Montgomery, Coatstone, Two Creeks, Deloraine and Ewart
  - Surface and ground water protection
    - No manure application is allowed, if lands are closed to other water bodies.
    - Appropriate fertilizer rates
  - Improve drainage
  - Reduce salinity risks
Considerations in soil management (cont.)

- Soils on imperfectly or poorly drained landscape: Montgomery, Coatstone, Two Creeks, Deloraine and Ewart
  - Reduce compaction on fine or heavy texture soils
  - Cultivate at the right moisture content
  - Plant deep-rooted crops, or crops suitable for late growing season
Considerations in soil management (cont.)

- Soils developed on fluvial materials
  - Nutrient management
    - Horizon arrangement
    - Horizon thickness
    - Soil texture
    - Water flow
    - Slope
Considerations in soil management (cont.)

- Soils with stones and cobles
  - Perennial forage/grasses
  - Grazing
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