



United States
Department of
Agriculture

In cooperation with
Minnesota Agricultural
Experiment Station



Natural
Resources
Conservation
Service

Soil Survey of Sherburne County, Minnesota



Nebish and similar soils*Extent:* 2 percent of the unit**Soils that have a substratum of sand or gravel***Extent:* 1 percent of the unit**204B—Cushing fine sandy loam, 2 to 8 percent slopes*****Component Description*****Cushing and similar soils***Extent:* 90 percent of the unit*Geomorphic description:* Hills on moraines*Position on the landform:* Backslopes and summits*Slope range:* 2 to 8 percent*Texture of the surface layer:* Fine sandy loam*Depth to restrictive feature:* Very deep (more than 60 inches)*Drainage class:* Well drained*Parent material:* Till*Flooding:* None*Wet soil moisture status is highest (depth, months):* 3.6 feet (April)*Wet soil moisture status is lowest (depth, months):* More than 6.7 feet (January, February, July, August, September)*Ponding:* None*Available water capacity to a depth of 60 inches:* 9.0 inches*Content of organic matter in the upper 10 inches:* 1.1 percent*Typical profile:*

A—0 to 6 inches; fine sandy loam

E,B/E—6 to 22 inches; fine sandy loam

Bt,BC—22 to 44 inches; clay loam

C—44 to 80 inches; loam

Additional Components**Talmoon and similar soils***Extent:* 4 percent of the unit**Bluffton and similar soils***Extent:* 3 percent of the unit**Beltrami and similar soils***Extent:* 2 percent of the unit**Soils that have a sandy substratum***Extent:* 1 percent of the unit**204C—Cushing fine sandy loam, 8 to 15 percent slopes*****Component Description*****Cushing and similar soils***Extent:* 95 percent of the unit*Geomorphic description:* Hills on moraines*Position on the landform:* Shoulders and backslopes*Slope range:* 8 to 15 percent*Texture of the surface layer:* Fine sandy loam*Depth to restrictive feature:* Very deep (more than 60 inches)*Drainage class:* Well drained*Parent material:* Till*Flooding:* None*Depth to wet soil moisture status:* More than 6.7 feet all year*Ponding:* None*Available water capacity to a depth of 60 inches:* 9.0 inches*Content of organic matter in the upper 10 inches:* 1.2 percent*Typical profile:*

Ap—0 to 7 inches; fine sandy loam

E—7 to 21 inches; fine sandy loam

Bt—21 to 44 inches; clay loam

C—44 to 80 inches; sandy loam

Additional Components**Bluffton and similar soils***Extent:* 2 percent of the unit**Beltrami and similar soils***Extent:* 1 percent of the unit**Soils that have a substratum of sand or gravel***Extent:* 1 percent of the unit**Talmoon and similar soils***Extent:* 1 percent of the unit**258B—Sandberg loamy coarse sand, 1 to 6 percent slopes*****Component Description*****Sandberg and similar soils***Extent:* 95 percent of the unit*Geomorphic description:* Hills on stream terraces

Position on the landform: Summits, shoulders, and backslopes
Slope range: 1 to 6 percent
Texture of the surface layer: Loamy coarse sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.9 inches
Content of organic matter in the upper 10 inches: 2.5 percent
Typical profile:
 Ap,A—0 to 14 inches; loamy coarse sand
 Bw—14 to 32 inches; gravelly coarse sand
 C—32 to 80 inches; sand

Additional Components

Soils that have a sandy substratum

Extent: 3 percent of the unit

Duelm and similar soils

Extent: 1 percent of the unit

Isan and similar soils

Extent: 1 percent of the unit

258C—Sandberg loamy coarse sand, 6 to 12 percent slopes

Component Description

Sandberg and similar soils

Extent: 95 percent of the unit
Geomorphic description: Hills on stream terraces
Position on the landform: Shoulders and backslopes
Slope range: 6 to 12 percent
Texture of the surface layer: Loamy coarse sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.6 inches

Content of organic matter in the upper 10 inches: 2.0 percent

Typical profile:

Ap—0 to 11 inches; loamy coarse sand
 Bw—11 to 26 inches; coarse sand
 C—26 to 80 inches; coarse sand

Additional Components

Soils that have a sandy substratum

Extent: 2 percent of the unit

Duelm and similar soils

Extent: 1 percent of the unit

Isan and similar soils

Extent: 1 percent of the unit

Soils that have a substratum of sandy loam

Extent: 1 percent of the unit

258E—Sandberg loamy coarse sand, 12 to 35 percent slopes

Component Description

Sandberg and similar soils

Extent: 95 percent of the unit
Geomorphic description: Hills on stream terraces; escarpments
Position on the landform: Shoulders and backslopes
Slope range: 12 to 35 percent
Texture of the surface layer: Loamy coarse sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.6 inches
Content of organic matter in the upper 10 inches: 2.0 percent
Typical profile:
 A—0 to 11 inches; loamy coarse sand
 Bw—11 to 27 inches; coarse sand
 C—27 to 80 inches; gravelly coarse sand

Additional Components

Soils that have a sandy substratum

Extent: 3 percent of the unit

Depth to restrictive feature: Very deep (more than 60 inches)

Drainage class: Poorly drained

Parent material: Outwash

Flooding: None

Wet soil moisture status is highest (depth, months): 0.5 foot (April, May)

Wet soil moisture status is lowest (depth, months): 2.0 feet (August, September)

Ponding: None

Available water capacity to a depth of 60 inches: 4.8 inches

Content of organic matter in the upper 10 inches: 6.5 percent

Typical profile:

Ap,A—0 to 18 inches; sandy loam

AB,Bg—18 to 29 inches; loamy sand

Cg—29 to 80 inches; coarse sand

Additional Components

Soils that have a surface layer of muck

Extent: 6 percent of the unit

Duelm and similar soils

Extent: 4 percent of the unit

1223—Sandberg-Arvilla complex, 0 to 3 percent slopes

Component Description

Sandberg and similar soils

Extent: 60 percent of the unit

Geomorphic description: Stream terraces

Position on the landform: Slight rises

Slope range: 1 to 3 percent

Texture of the surface layer: Loamy coarse sand

Depth to restrictive feature: Very deep (more than 60 inches)

Drainage class: Excessively drained

Parent material: Outwash

Flooding: None

Depth to wet soil moisture status: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 3.9 inches

Content of organic matter in the upper 10 inches: 2.5 percent

Typical profile:

Ap—0 to 11 inches; loamy coarse sand

Bw,BC—11 to 35 inches; gravelly coarse sand

C—35 to 80 inches; gravelly coarse sand

Arvilla and similar soils

Extent: 30 percent of the unit

Geomorphic description: Stream terraces

Position on the landform: Flats

Slope range: 0 to 2 percent

Texture of the surface layer: Coarse sandy loam

Depth to restrictive feature: Very deep (more than 60 inches)

Drainage class: Somewhat excessively drained

Parent material: Outwash

Flooding: None

Depth to wet soil moisture status: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.1 inches

Content of organic matter in the upper 10 inches: 2.5 percent

Typical profile:

Ap,A—0 to 14 inches; coarse sandy loam

Bw—14 to 17 inches; coarse sandy loam

2Bw,2C—17 to 80 inches; gravelly coarse sand

Additional Components

Soils that have a sandy substratum

Extent: 5 percent of the unit

Soils that have a gravelly surface layer

Extent: 3 percent of the unit

Duelm and similar soils

Extent: 1 percent of the unit

Isan and similar soils

Extent: 1 percent of the unit

1224—Hubbard-Verndale complex, 0 to 3 percent slopes

Component Description

Hubbard and similar soils

Extent: 60 percent of the unit

Geomorphic description: Stream terraces and outwash plains

Position on the landform: Slight rises

Slope range: 0 to 3 percent

Texture of the surface layer: Loamy coarse sand

Depth to restrictive feature: Very deep (more than 60 inches)