

## STATE OF MAINE SOILS CATENA KEY

The soil catena concept is a useful guide to understand the complex nature of soils that blanket the landscape. A soil catena is a sequence of soil series that extend across relief positions and are developed from similar parent material. Relief influences soil formation primarily through its effect on drainage, runoff, and erosion. The key that follows uses the catena concept by matching parent material and drainage, for each series. This is helpful in identifying the relationship of one series to others. It is intended to be used only as a guide; the Official Series Description should be used to identify the soil being evaluated.

(Series listed in *Italics*) have a mesic soil temperature regime and are no longer used in Maine.)

(Series listed as ~~strike through~~ are from outside MLRA Region R. These series may have different soil properties from what was described when these soils were first identified in Maine.)

PARENT MATERIAL  <small>Of the soils catena &amp; selected characteristics of the deepest, best drained member</small>	SOIL DRAINAGE CLASS						
	Excessively Drained	Somewhat Excessively Drained	Well Drained	Moderately Well Drained	Somewhat Poorly Drained	Poorly Drained	Very Poorly Drained
<b>A. Soils formed in Glacial Till</b>							
<b>1. Dark gray fine-grained quartzite, slate, phyllite, and some calcareous sandstone</b>							
a. Coarse-loamy soils			<a href="#">Bangor</a> <a href="#">Penquis<sup>3</sup></a>	<a href="#">Dixmont</a>	→		
b. Loamy-skeletal soils		<a href="#">Thorndike<sup>2</sup></a>	<a href="#">Danforth</a> <a href="#">Winnecook<sup>3</sup></a>	<a href="#">Shirley</a>	→		
c. Coarse-loamy soils formed in lodgement till		<a href="#">Monson<sup>2</sup></a>	<a href="#">Elliottsville<sup>3</sup></a>	<a href="#">Chesuncook</a>	<a href="#">Telos</a>	<a href="#">Monarda</a>	<a href="#">Burnham</a>
<b>2. Calcareous dark gray shale, silt-stone, phyllite, and limestone</b>							
a. Fine-loamy soils			<a href="#">Caribou</a> <a href="#">Mapleton<sup>3</sup></a>	<a href="#">Conant</a>	→	<a href="#">Easton</a>	Washburn*
b. Fine-loamy soils formed in lodgement till				<a href="#">Perham</a>	<a href="#">Daigle</a>	<a href="#">Aurelie</a>	
<b>3. Dark gray limestone and calcareous shale</b>							
a. Coarse-loamy soils	←	<a href="#">(Benson<sup>2</sup>)</a>	<a href="#">Linneus<sup>3</sup></a>				
<b>4. Red sandstone and conglomerate</b>							
a. Loamy soils		<a href="#">Creasey<sup>2</sup></a>					
<b>5. Fine-grained quartzite, slate, and some granite</b>							
a. Coarse-loamy soils formed in lodgement till			<a href="#">Plaisted</a>	<a href="#">Howland</a>		<a href="#">Monarda</a>	<a href="#">Burnham</a>
<b>6. Mica schist and phyllite with some granite and gneiss</b>							
a. Coarse-loamy soils	<a href="#">Abram<sup>1</sup></a>	<a href="#">Lyman<sup>2</sup></a> <a href="#">(Hollis<sup>2</sup>)</a>	<a href="#">Berkshire (Charlton)</a> <a href="#">Tunbridge<sup>3</sup></a>	<a href="#">Sunapee</a> <a href="#">(Sutton)</a>		<a href="#">Lyme</a> <a href="#">(Leicester)</a>	
b. Coarse-loamy soils formed in lodgement till			<a href="#">Marlow (Paxton)</a>	<a href="#">Dixfield</a> <a href="#">Peru (Woodbridge)</a>	←	<a href="#">Brayton</a> <a href="#">Pillsbury</a>	<a href="#">Peacham (Whitman)</a>
c. Coarse-loamy soils with a spodic horizon having >6% organic carbon			<a href="#">Hogback<sup>2</sup></a> <a href="#">Rawsonville<sup>3</sup></a>		<a href="#">(Ridgebury)</a>	→	

PARENT MATERIAL  Of the soils catena & selected characteristics of the deepest, best drained member	SOIL DRAINAGE CLASS						
	Excessively Drained	Somewhat Excessively Drained	Well Drained	Moderately Well Drained	Somewhat Poorly Drained	Poorly Drained	Very Poorly Drained
<b>7. High elevation soils with a cryic temperature regime (generally at elevations greater than 2500 feet)</b>							
a. Coarse-loamy soils formed in lodgement till			<a href="#">Sisk Saddleback<sup>2</sup></a>	<a href="#">Surplus</a>	————→	<a href="#">Bemis</a>	
b. Loamy-skeletal soils			<a href="#">Enchanted<sup>4</sup></a>				
<b>8. Granite, gneiss and some schist</b>							
a. Sandy-skeletal soils	<a href="#">Schoodic<sup>1</sup></a>	<a href="#">Hermon Canaan<sup>2</sup></a>		<a href="#">Waumbek</a>	←————	<a href="#">Naskeag<sup>3</sup></a>	
b. Coarse-loamy soils formed in lodgement till			<a href="#">Becket</a>	<a href="#">Skerry</a>	<a href="#">Westbury</a>		
c. Coarse-loamy over sandy or sandy-skeletal soils			<a href="#">Monadnock</a>				
<b>B. Soils formed in Glaciofluvial Material</b> <b>Mainly on deltas, terraces, eskers, kames and beaches</b>							
<b>1. Granite, gneiss, some sandstone and lesser amounts of slate, shale and phyllite</b>							
a. Sandy-skeletal soils	<a href="#">Colton (Hinckley)</a>			<a href="#">Duane</a>			
b. Sandy soils	<a href="#">(Windsor)</a>	<a href="#">Adams (Merrimac)</a>		<a href="#">Croghan (Deerfield)</a>	←———— ←————	<a href="#">Moosilauke Naumburg Kinsman (Walpole)</a>	<a href="#">Searsport (Scarboro)</a>
c. Sandy soils with a cemented spodic horizon					<a href="#">Finch (Saugatuck)</a>		
<b>2. Slate, shale, phyllite and lesser amounts of gneiss and limestone</b>							
a. Sandy-skeletal soils		<a href="#">Masardis</a>	←————	<a href="#">Stetson</a>	<a href="#">Sheepscot</a>		
b. Coarse-loamy over sandy or sandy-skeletal soils			<a href="#">Allagash (Agawam)</a>	<a href="#">Madawaska (Ninigret) Machias</a>	————→ ←———— ————→	<a href="#">(Fredon) (Atherton)</a>	<a href="#">(Halsey)</a>
c. Sandy soils				<a href="#">Skowhegan</a>	————→		
<b>C. Soils formed in Glaciomarine and Glaciolacustrine Deposits</b> <b>(Including some loess caps)</b>							
<b>1. Silt and clay deposits</b>							
a. Fine soils			<a href="#">(Suffield)</a>	<a href="#">Buxton</a>	<a href="#">Lamoine</a>	<a href="#">Scantic</a>	<a href="#">Biddeford</a>
b. Fine-silty soils				<a href="#">Boothbay</a>	<a href="#">Pushaw</a>	<a href="#">Swanville (Canandaigua)</a>	————→
<b>2. Very fine sand and silt deposits</b>							
a. Coarse-silty soils			<a href="#">Salmon (Hartland)</a>	<a href="#">Nicholville (Belgrade) (Scio)</a>	←————	<a href="#">Roundabout (Raynham)</a>	
<b>3. Loamy materials over silt and clay deposits</b>							
a. Coarse-loamy over clayey soils			<a href="#">Melrose</a>	<a href="#">Elmwood</a>	<a href="#">Swanton</a>	————→	<a href="#">Whately</a>



PARENT MATERIAL  Of the soils catena & selected characteristics of the deepest, best drained member	SOIL DRAINAGE CLASS						
	Excessively Drained	Somewhat Excessively Drained	Well Drained	Moderately Well Drained	Somewhat Poorly Drained	Poorly Drained	Very Poorly Drained
<b>5. Sapristis</b>							
a. pH $\leq$ 4.5							<a href="#">Bucksport</a>
b. Terric soils, pH $\geq$ 4.5							<a href="#">Wonsqueak</a> <a href="#">Pondicherry</a> <a href="#">Markey</a>
c. Undifferentiated soils							Borosapristis

**Footnotes :**

- <sup>1</sup> Very shallow (<10 inches of mineral soil above bedrock)
  - <sup>2</sup> Shallow (10 to <20 inches of mineral soil above bedrock)
  - <sup>3</sup> Moderately deep (20 to < 40 inches of mineral soil above bedrock)
  - <sup>4</sup> Deep (40 to < 60 inches of mineral soil above bedrock)
- All others are Very Deep (> 60 inches of mineral soil above bedrock)

\* **Washburn is an inactive series & no current description is available.**

\***Ricker was used in both cryic & frigid areas prior to 2007.**



The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

Revised 3/2008; subject to change