

## Forage Suitability Groups (MN)

Norman County, Minnesota

[Absence of an entry indicates that a forage suitability group was not assigned]

Map symbol and soil name	Pct. of map unit	Land resource unit	Forage suitability group number
Ad:			
Alluvial land, occasionally flooded	85	N	03
Cashel	5	---	---
Colvin, depressional	5	---	---
Fargo, depressional	5	---	---
Af:			
Alluvial land, frequently flooded	85	N	16
Marsh	8	---	---
Water	7	---	---
Ar:			
Arveson	85	N	09
Hamar	5	---	---
Rockwell	5	---	---
Ulen	5	---	---
As:			
Arveson, depressional	45	N	13
Hamar, depressional	45	N	03
Kratka	3	---	---
Markey	3	---	---
Rockwell	3	---	---
Marsh	1	---	---
Aw:			
Augsburg	45	N	09
Wheatville	45	N	10

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Map symbol and soil name	Pct. of map unit	Land resource unit	Forage suitability group number
Aw:			
Bearden	2	---	---
Borup	2	---	---
Colvin	2	---	---
Glyndon	2	---	---
Grimstad	1	---	---
Rockwell	1	---	---
BaA:			
Barnes	85	N	02
Barnes, eroded	3	---	---
Kittson	3	---	---
Soils that have sandy material at a depth of 36 to 70 inches	3	---	---
Swenoda	3	---	---
Waukon	2	---	---
Poorly drained soils	1	---	---
BaB:			
Barnes	85	N	02
Barnes, eroded	3	---	---
Kittson	3	---	---
Swenoda	3	---	---
Waukon	3	---	---
Poorly drained soils	1	---	---
Soils that have sandy material at a depth of 36 to 70 inches	1	---	---

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BaB:			
Sverdrup	1	---	---
BaB2:			
Barnes, eroded	85	N	02
Barnes	2	---	---
Hamerly	2	---	---
Kittson	2	---	---
Langhei	2	---	---
Sverdrup	2	---	---
Swenoda	2	---	---
Poorly drained soils	1	---	---
Soils that have sandy material at a depth of 36 to 70 inches	1	---	---
Waukon	1	---	---
BaC2:			
Barnes, eroded	85	N	02
Barnes	3	---	---
Sverdrup	3	---	---
Swenoda	3	---	---
Waukon	3	---	---
Langhei	2	---	---
Soils that have sandy material at a depth of 40 to 70 inches	1	---	---
BbB2:			
Barnes, eroded	65	N	02

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BbB2:			
Langhei, eroded	25	N	10
Darnen	2	---	---
Soils that have a thicker and darker surface layer	2	---	---
Sverdrup	2	---	---
Swenoda	2	---	---
Very poorly drained soils	1	---	---
Waukon	1	---	---
BcA:			
Bearden	85	N	10
Colvin	3	---	---
Fargo	3	---	---
Glyndon	3	---	---
Hegne	3	---	---
Wheatville	3	---	---
BcB:			
Bearden	85	N	10
Bearden, eroded	4	---	---
Fargo	4	---	---
Wahpeton	4	---	---
Soils where slopes are more than 6 percent	3	---	---
BcC2:			
Bearden, eroded	85	N	10
Bearden	4	---	---

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BcC2:			
Fargo	4	---	---
Wahpeton	4	---	---
Soils where slopes are more than 12 percent	3	---	---
Bf:			
Bearden	50	N	10
Fargo	30	N	01
Colvin	10	---	---
Hegne	10	---	---
Bo:			
Borup, depressional	85	N	13
Colvin, depressional	8	---	---
Soils tha have a highly organic, mucklike surface layer	7	---	---
Bp:			
Borup	45	N	09
Glyndon	45	N	10
Augsburg	2	---	---
Grimstad	2	---	---
Rockwell	2	---	---
Soils that have a loam or silt loam surface over fine sand	2	---	---
Wheatville	2	---	---
Br:			
Alluvial land, very frequently flooded	45	N	16

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Map symbol and soil name	Pct. of map unit	Land resource unit	Forage suitability group number
Br:			
Breaks, rarely flooded	45	N	24
Alluvial land, occasionally flooded	2	---	---
Alluvial land, frequently flooded	2	---	---
Cashel	2	---	---
Fargo	2	---	---
Bearden	1	---	---
Wahpeton	1	---	---
CaA:			
Cashel, occasionally flooded	85	N	09
Alluvial land, occasionally flooded	8	---	---
Fargo, depressional	7	---	---
CaC:			
Cashel, occasionally flooded	85	N	09
Fargo	8	---	---
Wahpeton	7	---	---
Cb:			
Cathro	85	N	14
Flom	3	---	---
Roliss	3	---	---
Soils with less than 16 inches of organic surface material	3	---	---
Soils with more than 10 inches organic material	3	---	---

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Map symbol and soil name	Pct. of map unit	Land resource unit	Forage suitability group number
Cb:			
Vallers	3	---	---
Cn:			
Colvin	85	N	09
Augsburg	3	---	---
Bearden	3	---	---
Borup	3	---	---
Fargo	3	---	---
Hegne	3	---	---
Co:			
Colvin, depressional	85	N	13
Fargo, depressional	8	---	---
Borup, depressional	7	---	---
DaB:			
Darnen	85	N	02
Barnes	3	---	---
Flom	3	---	---
Kittson	3	---	---
Soils that are calcareous at or near the surface	3	---	---
Soils with coarser textured colluvium	3	---	---
Du:			
Dune land	85	N	22
Arveson	5	---	---
Flaming	5	---	---

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Map symbol and soil name	Pct. of map unit	Land resource unit	Forage suitability group number
Du:			
Hamar	5	---	---
FaA:			
Fargo	85	N	01
Colvin	5	---	---
Hegne	5	---	---
Wahpeton	5	---	---
FaB:			
Fargo	85	N	01
Bearden	4	---	---
Cashel	4	---	---
Wahpeton	4	---	---
Hegne	3	---	---
FcA:			
Fargo	85	N	01
Colvin	3	---	---
Fargo, depressional	3	---	---
Hegne, depressional	3	---	---
viking-like	3	---	---
Wahpeton	3	---	---
FcB:			
Fargo	85	N	01
Cashel	4	---	---
Hegne-like	4	---	---
Wahpeton	4	---	---

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FcB:			
Bearden	3	---	---
Fd:			
Fargo, depressional	85	N	13
Cashel	8	---	---
Colvin, depressional	7	---	---
Ff:			
Flaming, wind eroded	90	N	04
Arveson	2	---	---
Hamar	2	---	---
Poppleton-like	2	---	---
Soils that have a surface layer more than 16 inches thick	2	---	---
Ulen	2	---	---
Fh:			
Arveson	30	N	09
Flaming	30	N	04
Hamar	30	N	03
Dune Land	2	---	---
Kratka	2	---	---
Poppleton	2	---	---
Towner	2	---	---
Ulen	2	---	---
Fm:			
Flom	85	N	01

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Map symbol and soil name	Pct. of map unit	Land resource unit	Forage suitability group number
Fm:			
Kittson	4	---	---
Soils that have deposits of colluvium	4	---	---
Vallers	4	---	---
Soils that contain less sand and more silt than Flom soils	3	---	---
Fv:			
Flom, depressional	45	N	13
Vallers, depressional	45	N	09
Cathro	5	---	---
Marsh	5	---	---
FxA:			
Foxhome	85	N	02
Hangaard	3	---	---
Kittson	3	---	---
Mavie	3	---	---
Roliss	3	---	---
Sioux	3	---	---
GIA:			
Glyndon	85	N	10
Augsburg	4	---	---
Borup	4	---	---
Wheatville	4	---	---
Bearden	3	---	---

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Map symbol and soil name	Pct. of map unit	Land resource unit	Forage suitability group number
GIB:			
Glyndon	85	N	10
Alluvial land, occasionally flooded	5	---	---
Bearden	5	---	---
Borup	5	---	---
Gn:			
Glyndon, wind eroded	85	N	10
Borup	4	---	---
Glyndon	4	---	---
Wheatville	4	---	---
Augsburg	3	---	---
Gp:			
Pits, gravel	100	N	24
Gr:			
Grimstad	85	N	10
Rockwell	3	---	---
Soils with no well-defined zone of carbonate accumulation	3	---	---
Swenoda	3	---	---
Ulen	3	---	---
Wheatville	3	---	---
Ha:			
Hamar	85	N	03
Arveson	3	---	---
Flaming	3	---	---

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Map symbol and soil name	Pct. of map unit	Land resource unit	Forage suitability group number
Ha:			
Kratka	3	---	---
Soils with a dark-colored surface less than 10 inches thick	3	---	---
Ulen	3	---	---
HeA:			
Hamerly	85	N	10
Kittson	4	---	---
Soils with more than 24 inches of sorted material over till	4	---	---
Vallers	4	---	---
Soils with a dark-colored surface layer less than 7 inches	3	---	---
HeB:			
Hamerly	85	N	10
Soils with a dark-colored surface layer less than 7 inches	4	---	---
Soils with more than 24 inches of sorted material over till	4	---	---
Vallers	4	---	---
Langhei	3	---	---
Hm:			
Hamerly	55	N	10
Vallers	35	N	09
Barnes	2	---	---
Flom	2	---	---

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Map symbol and soil name	Pct. of map unit	Land resource unit	Forage suitability group number
Hm:			
Kittson, uplands	2	---	---
Langhei	2	---	---
Swenoda	2	---	---
Hn:			
Hangaard	85	N	11
Arveson	3	---	---
Hamar	3	---	---
Mavie	3	---	---
Sioux	3	---	---
Syrene	3	---	---
Ho:			
Hegne	50	N	09
Fargo	30	N	01
Bearden	7	---	---
Colvin	7	---	---
Viking	6	---	---
Hv:			
Hegne	50	N	09
Viking	30	N	01
Bearden	7	---	---
Colvin	7	---	---
Fargo	6	---	---
INT:			
Water, intermittent	100	---	---

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Map symbol and soil name	Pct. of map unit	Land resource unit	Forage suitability group number
KsA:			
Kittson	85	N	02
Foxhome	3	---	---
Hamerly	3	---	---
Roliss	3	---	---
Soils with less than 10 inch surface and dark subsoil	3	---	---
Swenoda	2	---	---
Soils with more than 35 percent clay in the subsoil	1	---	---
KsC:			
Kittson	85	N	02
Foxhome	3	---	---
Hamerly	3	---	---
Soils with less than 10 inch surface and dark subsoil	3	---	---
Soils with more than 35 percent clay in the subsoil	3	---	---
Swenoda	2	---	---
Roliss	1	---	---
KtA:			
Kittson, uplands	85	N	02
Barnes	3	---	---
Hamerly	3	---	---
Soils that contain more than 5 percent coarse fragments	3	---	---

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KtA:			
Soils with less than 10 inches of surface and dark subsoil	3	---	---
Swenoda	2	---	---
Poorly drained soils	1	---	---
KtB:			
Kittson, uplands	85	N	02
Barnes	3	---	---
Hamerly	3	---	---
Soils that contain more than 5 percent coarse fragments	3	---	---
Soils with less than 10 inches of surface and dark subsoil	3	---	---
Swenoda	2	---	---
Poorly drained soils	1	---	---
LbC2:			
Langhei, eroded	50	N	10
Barnes, eroded	40	N	02
Darnen	2	---	---
Sverdrup	2	---	---
Swenoda	2	---	---
Waukon	2	---	---
Flom	1	---	---
Soils with a calcareous surface layer and darker colored	1	---	---

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LbD2:			
Langhei, eroded	55	N	23
Barnes, eroded	35	N	02
Darnen	2	---	---
Sverdrup	2	---	---
Swenoda	2	---	---
Waukon	2	---	---
Flom	1	---	---
Soils with a calcareous surface layer and darker colored	1	---	---
LbE:			
Langhei	60	N	17
Barnes	30	N	02
Darnen	3	---	---
Maddock	3	---	---
Sioux	2	---	---
Waukon	2	---	---
M-W:			
Water, miscellaneous	100	---	---
MaA:			
Maddock	90	N	04
Sioux	3	---	---
Sverdrup	3	---	---
Swenoda	2	---	---
Hamar	1	---	---

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Map symbol and soil name	Pct. of map unit	Land resource unit	Forage suitability group number
MaA:			
Soils with a dark surface less than 10 inches thick	1	---	---
MaC:			
Maddock	90	N	04
Sioux	3	---	---
Sverdrup	3	---	---
Swenoda	2	---	---
Hamar	1	---	---
Soils with a dark surface less than 10 inches thick	1	---	---
Me:			
Markey	85	N	14
Arveson, depressional	3	---	---
Hamar, depressional	3	---	---
Soils with an organic surface, underlain by sands, then loam	3	---	---
Soils with less than 16 inches organic material over sands	3	---	---
Rockwell, depressional	2	---	---
Kratka, depressional	1	---	---
Mh:			
Marsh	100	N	24
Mm:			
Mavie	85	N	09
Rockwell	3	---	---
Roliss	3	---	---

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Map symbol and soil name	Pct. of map unit	Land resource unit	Forage suitability group number
Mm:			
Soils that lack a strongly or very strongly calcareous layer	3	---	---
Syrene	3	---	---
Vallers	3	---	---
PB:			
Pits, borrow	100	---	---
Po:			
Poppleton	90	N	04
Flaming	2	---	---
Hamar	2	---	---
Swenoda	2	---	---
Towner	2	---	---
Ulen	2	---	---
Rc:			
Rockwell	85	N	09
Arveson	3	---	---
Grimstad	3	---	---
Soils where gravelly pockets replace the sand layer	3	---	---
Soils with a loamy fine sand surface and less calcareous	3	---	---
Vallers	3	---	---
Rk:			
Kratka, depressional	45	N	13
Rockwell, depressional	45	N	13

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Map symbol and soil name	Pct. of map unit	Land resource unit	Forage suitability group number
Rk:			
Arveson	3	---	---
Hamar	3	---	---
Markey	2	---	---
Roliss, depressional	2	---	---
Ro:			
Roliss	85	N	09
Kittson	3	---	---
Mavie	3	---	---
Rockwell	3	---	---
Vallers	3	---	---
Viking	3	---	---
Rs:			
Roliss, depressional	85	N	13
Cathro	3	---	---
Kratka, depressional	3	---	---
Marsh	3	---	---
Rockwell, depressional	3	---	---
Vallers	3	---	---
Ru:			
Rondeau	85	N	14
Marsh	5	---	---
Soils that have no lake sediments	5	---	---

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Map symbol and soil name	Pct. of map unit	Land resource unit	Forage suitability group number
Ru:			
Soils with herbaceous material between 36 and 51 inches	5	---	---
Sc:			
Seelyeville	85	N	14
Marsh	5	---	---
Soils with higher undisturbed and rubbed fiber content	5	---	---
Soils with organic accumulations between 36 and 50 inches	5	---	---
SdA:			
Sioux	90	N	22
Foxhome	2	---	---
Hangaard	2	---	---
Maddock	2	---	---
Soils that have a subsoil of loam	2	---	---
Soils with a surface layer more than 14 inches thick	2	---	---
SdB:			
Sioux	90	N	22
Foxhome	2	---	---
Hangaard	2	---	---
Maddock	2	---	---
Soils that have a subsoil of loam	2	---	---
Soils with a surface layer more than 14 inches thick	2	---	---

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Map symbol and soil name	Pct. of map unit	Land resource unit	Forage suitability group number
SgA:			
Sioux	90	N	22
Foxhome	5	---	---
Maddock	5	---	---
SgC:			
Sioux	90	N	22
Foxhome	5	---	---
Maddock	5	---	---
SmE:			
Maddock	45	N	18
Sioux	45	N	18
Sverdrup	4	---	---
Areas of steep, medium- textured till soils	3	---	---
Swenoda	3	---	---
SnA:			
Sverdrup	85	N	04
Maddock	4	---	---
Sioux	4	---	---
Swenoda	4	---	---
Soils with a dark-colored surface layer less than 10 inches	3	---	---
SnC:			
Sverdrup	85	N	04
Maddock	4	---	---
Sioux	4	---	---

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Map symbol and soil name	Pct. of map unit	Land resource unit	Forage suitability group number
SnC:			
Swenoda	4	---	---
Soils with a dark-colored surface layer less than 10 inches	3	---	---
SwA:			
Swenoda	85	N	02
Grimstad	4	---	---
Soils that lack underlying finer textured material	4	---	---
Towner	4	---	---
Soils with more than 35 percent clay in underlying layers	3	---	---
SwC:			
Swenoda	85	N	02
Grimstad	5	---	---
Soils with a dark-colored surface layer less than 16 inches	5	---	---
Towner	5	---	---
Sy:			
Syrene	85	N	11
Arveson	5	---	---
Hangaard	5	---	---
Mavie	5	---	---
To:			
Towner	85	N	02
Flaming	4	---	---

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Map symbol and soil name	Pct. of map unit	Land resource unit	Forage suitability group number
To:			
Grimstad	4	---	---
Swenoda	4	---	---
Soils with a dark-colored surface less than 16 inches	3	---	---
UIA:			
Ulen	85	N	12
Arveson	4	---	---
Flaming	4	---	---
Grimstad	4	---	---
Soils that have a high content of very fine sand	3	---	---
Un:			
Ulen, wind eroded	85	N	12
Arveson	4	---	---
Flaming	4	---	---
Ulen	4	---	---
Poppleton	3	---	---
Va:			
Vallers	85	N	09
Flom	3	---	---
Hamerly	3	---	---
Roliss	3	---	---
Soils with a surface of well-sorted silt loams 24 inches	3	---	---

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Va:			
Soils with less than an 8 inch surface layer	2	---	---
Soils with a very stong calcareous surface layer	1	---	---
Vd:			
Vallers, depressional	85	N	13
Cathro	3	---	---
Flom	3	---	---
Marsh	3	---	---
Roliss	3	---	---
Soils with 24 inches or more of water-modified silt loam	2	---	---
Soils with a surface of dark-colored colluvial material	1	---	---
Vk:			
Viking	85	N	01
Rockwell	4	---	---
Roliss	4	---	---
Vallers	4	---	---
Mavie	3	---	---
W:			
Water	100	---	---
WaA:			
Wahpeton	85	N	02
Bearden	5	---	---
Cashel	5	---	---

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Map symbol and soil name	Pct. of map unit	Land resource unit	Forage suitability group number
WaA:			
Fargo	5	---	---
WaB:			
Wahpeton	85	N	02
Bearden	5	---	---
Cashel	5	---	---
Fargo	5	---	---
WaC:			
Wahpeton	85	N	02
Soils with a thinner dark- colored layers and more calcareous	10	---	---
Fargo	5	---	---
WkA:			
Waukon	85	N	02
Barnes	3	---	---
Flom	2	---	---
Kittson	2	---	---
Parnell	2	---	---
Soils with a thicker or darker surface layer	2	---	---
Soils with sandy underlying material below 40 inches	2	---	---
Swenoda	2	---	---
WkB:			
Waukon	85	N	02
Barnes	3	---	---

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WkB:			
Darnen	2	---	---
Flom	2	---	---
Parnell	2	---	---
Soils with sandy underlying material below 40 inches	2	---	---
Swenoda	2	---	---
Waukon, eroded	2	---	---
WkB2:			
Waukon, eroded	85	N	02
Barnes	3	---	---
Langhei	3	---	---
Soils with sandy underlying material below 40 inches	3	---	---
Swenoda	3	---	---
Flom	2	---	---
Parnell	1	---	---
WkC:			
Waukon	85	N	02
Barnes	3	---	---
Flom	2	---	---
Langhei	2	---	---
Parnell	2	---	---
Soils with sandy underlying material below 40 inches	2	---	---

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WkC:			
Swenoda	2	---	---
Waukon, eroded	2	---	---
WkD:			
Waukon	85	N	23
Barnes	3	---	---
Langhei	3	---	---
Soils with sandy underlying material below 40 inches	3	---	---
Swenoda	3	---	---
Waukon, eroded	2	---	---
Flom	1	---	---
Wm:			
Wheatville	85	N	10
Augsburg	5	---	---
Borup	5	---	---
Glyndon	5	---	---