

Certified Perennial Grass Varieties Recommended for Nebraska

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Background Information

More than 100 species of perennial grasses are adapted to and grown in Nebraska. They are classified as either “cool-season” or “warm-season” grasses.

Cool-season grasses grow rapidly during spring, often using the available soil moisture and nitrogen prior to warm-season grass growth. They go semi-dormant during the hot months of summer when soil moisture is limited. Regrowth in late summer and fall occurs as cool temperatures and soil moisture return. Often they remain partially green throughout winter but will not grow until frost becomes less frequent and severe.

Warm-season grasses begin growth about one month later than cool-season grasses. Growth is rapid in late spring and early summer due to efficient use of available soil moisture and nutrients. Growth generally slows by late summer or early fall, and plants go dormant prior to or after frosts. Some cultivars will have live green tissue until a hard freeze kills all top growth.

Ideal grazing systems utilize both cool-season and warm-season grasses in separate pastures. Both stocking rate and average daily gain can be increased 25 percent by grazing cool-season grasses in spring and fall and warm-season grasses in summer, compared to grazing one type of grass the entire growing season.

Mixtures containing cool and warm-season grasses in the same pasture are usually more difficult to manage, except for certain range plantings, because livestock will selectively overgraze certain grasses while avoiding others. In addition, high rainfall during the spring will encourage growth of cool-season grasses to the subsequent detriment of warm-season grasses in the mixture.

Advantages of Recommended Varieties

The selection of varieties can be just as critical to a successful seeding as the species selection. Improved varieties of species best suited for pasture, range, conservation, and bioenergy seedings in Nebraska have been developed. These varieties have diverse genetic traits that help individual plants adapt to specific soil and site conditions, perform better, adapt to a wider geographic area,

and are superior in vigor, production, persistence, and resistance to insects and diseases within their area of adaptation.

Importance of Using Certified Seed

Planting certified seed assures genetic purity and high seed quality. Certified seed is planted, grown, harvested, processed, and marketed following strict standards. Inspections during production and processing help assure that these standards have been met. Only seed that meets these standards may carry the certified seed label. Planting seed of questionable or unknown origin and performance is a gamble that most people cannot afford.

Irrigated Pasture Seedings

To increase grazing value, legumes such as grazing alfalfa are recommended for irrigated cool-season grass pastures. Warm-season grasses should not be mixed with cool-season grasses on irrigated pastures. Refer to NebGuide 1502 *Perennial Forages for Irrigated Pasture* for further guidance.

Using the Map and Table

The Major Land Resource Areas (MLRA) Map for selecting adapted grass species and varieties depicts 16 areas within the state. Varieties of grasses listed for use in a specific MLRA are best adapted to the MLRAs they are listed in. After identifying the area on the map, use the table to select an appropriate grass variety for your site. (Sites are further described in footnote 2 of the table.) Grass varieties are listed alphabetically using three subheadings: Cool-Season Native Grasses, Cool-Season Introduced Grasses, and Warm-Season Native Grasses.

The most current version of this document is available at www.ne.nrcs.usda.gov (click on Nebraska eFOTG, Section II, Statewide Soil and Site Information, Pasture and Hayland Interpretations).

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Nebraska's Major Land Resource Areas For Selecting Adapted Grass Species and Varieties



60A	Pierre Shale Plains and Badlands	72	Central High Tableland
63B	Southern Rolling Pierre Shale Plains	73E & W	Rolling Plains and Breaks
64	Mixed Sandy and Silty Tableland	75	Central Loess Plains
65E & W	Nebraska Sandhills	102C	Loess Uplands and Till Plains
66	Dakota-Nebraska Eroded Tableland	106	Nebraska and Kansas Loess Drift Hills
67	Central High Plains	107N & S	Iowa and Missouri Deep Loess Hills
71	Central Nebraska Loess Hills		

1,2 Varieties of Grasses for Use in Major Land Resource Areas of Nebraska

Kind of grass and certified variety	Panhandle 60A, 64, 67	Southwest 72, 73W	Western Sandhills 65w	Eastern Sandhills 65E	North Central 63B, 66	Central 71	South Central 73E, 75	Northeast 102C, 107N	Southeast 106, 107S
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Cool-season Native Grasses

Bluebunch Wheatgrass — Adapted to the pine ridge area on open ponderosa pine woodlands or dry or well-drained soils. Use in conservation or wildlife plantings only.

Goldar	s	—	—	—	—	—	—	—	—
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Canada Wildrye — Short-lived native grass that reseeds and is excellent for wildlife plantings. Use in conservation mixtures only. Homestead showed low drought tolerance in trials and should not be used in western Nebraska.

Mandan	b w a	—	b i w a	b i w a	b i w a	b w a	b w a	b w a	b w a
Homestead	—	—	—	—	b w a	b w a	b w a	b w a	b w a

Green Needlegrass — Cucharas will soon be released. Slow to establish. Grows on medium to fine-textured soils. Growth begins in early spring when cattle will seek it out, and continues in the fall when moisture conditions are favorable. Makes excellent recovery after grazing. Use in mixtures only.

Cucharas	—	H s B	—	—	—	—	—	—	—
Lodorm	H s B	—	H s B	H s B	H s B	—	—	—	—

Indian Ricegrass — - Well adapted for stabilization of disturbed sandy soils in mixes with other native grasses.

Nezpar	h s	h s	h s	—	—	—	—	—	—
Rimrock	h s	h s	h s	—	—	—	—	—	—

Thickspike Wheatgrass — A drought-tolerant rhizomatous wheatgrass that provides good early-season forage.

Critana	h s b	h s b	h s b	—	—	—	—	—	—
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Virginia Wildrye — Adapted to wet sites. Short-lived native grass that is excellent for wildlife plantings. Use in conservation mixtures only.

Cuivre River	—	—	—	w	w	b w	b w	b w	b w
Omaha	—	—	—	w	w	b w	b w	b w	b w

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Cool-Season Native Grasses (continued)

Western Wheatgrass — Sod forming native grass that is adapted to a wide array of sites. Excellent choice for critical area plantings such as grassed waterways.

Arriba	h s b i w a	h s b i w a	—	—	—	—	—	—	—
Barton	h s b i w a	h s b i w a	h s b i w a	H S B i w A	h s b i w a	h s b i w a			
Flintlock	H S B i w A	h s b i w a	h s b i w a						
Rodan	h s b i w a	—	h s b i w a	h s b i w a	h s b i w a	—	—	—	—
Rosana	h s b i w a	—	h s b i w a	h s b i w a	h s b i w a	—	—	—	—

Cool-Season Introduced Grasses

Creeping Foxtail — Sod forming grass that is well adapted to wet site conditions, but also adapts to normal site conditions. Tolerates both moderately acid (pH 5.6-6.0) and moderately alkaline (pH 7.9-8.4) soils, and has survived a pH of 9.0 on wet soils. Aggressively invades native wet meadows.

Garrison	b I W A	b I W a	b I W a	B I W a	B I W a	B I W a	b I W a	B I W a	b I W a
Retain	b i w a	b i w a	b i w a	b i w a	b i w a	b i w a	b i w a	b i w a	b i w a

Crested Wheatgrass — Provides early spring forage. *Use certified seed only.

Hycrest*	H B	H B	H B	H B	—	h b	h b	—	—
Nordan	h b	—	h b	h b	h b	—	—	—	—
NU-ARS-AC2	H B	h b	h b	—	—				
Ruff	h b	h b	h b	h b	h b	h b	h b	—	—

Festulolium — Cross between meadow fescue and ryegrass. Long-term performance unknown.

Hykor	I	I	I	I	I	I	I h b	I h b	I H B
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Cool-Season Introduced Grasses (continued)

Intermediate Wheatgrass — Drought tolerant and excellent choice for limited or full irrigation. *Pubescent types.

Amur	h s b i	h s b i	h s b i	h s b i	h s b i	h s b i	h s b i	h s b i	h s b i
Beefmaker	H s B I	HSBI	HSBI	HSBI	HSBI				
Clarke	h s b i	h s b i	h s b i	h s b i	h s b i	h s b i	h s b i	h s b i	h s b i
Haymaker	H s B I	HSBI	HSBI	HSBI	HSBI				
Luna*	h s b i	h s b i	h s b i	h s b i	h s b i	h s b i	h s b i	h s b i	h s b i
Mandan*	h s b i	h s b i	h s b i	h s b i	h s b i	h s b i	h s b i	h s b i	h s b i
Manska*	h s b i	h s b i	h s b i	h s b i	h s b i	h s b i	h s b i	h s b i	h s b i
Oahe	h s b i	h s b i	h s b i	h s b i	h s b i	h s b i	h s b i	h s b i	h s b i
Reliant	h s b i	h s b i	h s b i	h s b i	h s b i	h s b i	h s b i	h s b i	h s b i
Slate	h s b i	h s b i	h s b i	h s b i	h s b i	h s b i	h s b i	h s b i	h s b i

Meadow Brome — A vigorously-tillering bunchgrass with excellent early growth and good fall regrowth. Use in mixtures only.

Cache	b I	b I	b I	BI	BI	HBI	HSBI	h s b I	h s b I
Fleet	i	b I	b I	BI	BI	HBI	HSBI	h s b I	h s b I
Montana	b I	b I	b I	BI	BI	HBI	HSBI	h s b I	h s b I
Paddock	i	b I	b I	BI	BI	HBI	HSBI	h s b I	h s b I
Regar	b I	b I	b I	BI	BI	HBI	HSBI	h s b I	h s b I

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Cool-Season Introduced Grasses (continued)

Orchardgrass — Cool-season bunchgrass that initiates growth later and sustains summer production. Good irrigated pasture grass for use in mixtures only.

							75	73E	Both		
Akaroa	I	I w	I	I	B I w	I w	B	b	I w	H s B I	H S B I
Ambra	i	i w	i	i	b i w	i w	b	b	i w	h s b i	h S b i
Athos	i	i w	i	i	B i w	i w	B	b	i w	H s B i	H S B i
Baridana	I	I w	I	I	B I w	I w	B	b	I w	H s B I	H S B I
Duke	—	—	—	—	—	—	—	—	—	H s B I	H s B I
Extend	I	I w	I	I	B I w	I w	B	b	I w	H s B I	H S B I
Hallmark	—	i w	—	—	b i w	i w	b	b	i w	h s b i	h s b i
Intensiv	I	I w	I	I	B I w	I w	B	b	I w	H s B I	H S B I
Latar	I	I w	I	I	B I w	I w	B	b	I w	H s B I	H S B I
Mammoth	I	I w	I	I	B I w	I w	B	b	I w	H s B I	H S B I
Niva	i	i w	i	i	B i w	i w	B	b	i w	H s B i	H S B i
Paiute	h b i	h b i	h b i	—	—	—	—	—	—	—	—
Persist	I	I w	I	I	B I w	I w	B	b	I w	H s B I	H S B I
Pizza	I	I w	I	I	B I w	I w	B	b	I w	H s B I	H S B I
Potomac	—	i w	—	—	b i w	i w	b	b	i w	h s b i	h s b i
Satin	I	I w	I	I	B I w	I w	B	b	I w	H s B I	H S B I
Sparta	i	i w	i	i	B i w	i w	B	b	i w	H s B i	H S B i

Reed Canarygrass — Aggressively spreads in native wet meadows, wetlands, and stream banks. Not recommended for use if other adapted species are available that will accomplish desired objectives.

Ioreed	i w	i w	i w	i w	h b i w	i w	h b i w	h b i w	h b i w
Palaton	i W	i W	i W	i W	h b i W	i W	h b i W	h B i W	h B i W
Rise	i w	i w	i w	i w	h b i w	i w	h b i w	h b i w	h b i w
Vantage	i w	i w	i w	i w	h b i w	i w	h b i w	h b i w	h b i w
Venture	i W	i W	i W	i W	h b i W	i W	h b i W	h B i W	h B i W

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Cool-Season Introduced Grasses (continued)

Russian Wildrye — Provides early spring forage.

Bozoisky	H s B i a	—	H s B i a	H s i a	H s i a	—	—	—	—
Mankota	H s B i a	—	H s B i a	H s B i a	H s B i a	—	—	—	—
Vinall	h s b i a	—	h s b i a	h s b i a	h s b i a	—	—	—	—

Perennial Ryegrass — Perennial ryegrass is not a persistent species and should only be used in mixtures as companion cover or in temporary grass plantings.

Smooth Brome — Winter hardiness, seedling vigor, and rapid stand establishment are rated high for smooth brome. This species is aggressive and can take over stands with improper management. May also invade adjacent native grasslands.

Badger	I	b I	b I	H B I	H B I	H s B I	H S B I	H S B I	H S B I
Lincoln	I	b I	b I	H B I	H B I	H s B I	H S B I	H S B I	H S B I
Peak	I	b I	b I	H B I	H B I	H s B I	H S B I	H S B I	H S B I
Rebound	I	I	b I	H B I	H B I	H B I	H S B I	H S B I	H S B I

Tall Fescue — Deep-rooted bunchgrass with short rhizomes. Tolerates wet soils and soil pH from acidic to moderately alkaline. Excellent fall growth that remains green after frost, providing good quality grazing in late fall. May become invasive on adjacent native grasslands. The following varieties are endophyte (fungus)-free.

Drover	b I a	b I a	I	I	h b I a	h b i a	H B I a	H B I a	H B I a
Fawn	—	—	—	—	—	b i	h b i	h b i	h b i a
Jesup Max Q	i	i	—	—	—	—	h b i	h b i	H B i
Kenhy	—	—	—	—	—	b i	h b i	h b i	h b i a
Martin	i	i	i	i	i	i	h b i	h b i	H B i a
Mozark	—	—	i	i	i	i	h b i	h b i	H B i a
Triumph	i	i	i	i	i	i	i	i	i
Tuscany II	i	i	i	i	i	i	H B i	H B i	H B i

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Cool-Season Introduced Grasses (continued)

Tall Wheatgrass — Tall, coarse, late-maturing bunchgrass that is tolerant of saline-alkali soils with high water tables. Becomes coarse and unpalatable to livestock as it matures. Mature stems need to be mowed to allow use of new growth by livestock. Not recommended for seeding into native alkaline meadows.

Alkar	bi w A	h bi w A	h bi w A	h bi w A					
Jose	bi w A	h bi w A	h bi w A	h bi w A					
Platte	bi w A	h bi w A	h bi w A	h bi w A					

Wheatgrass Hybrids — A well-suited bunchgrass adapted to saline and alkalai soils with high water tables. *Cross between bluebunch wheatgrass and quackgrass.

Newhy*	h bi w A								
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Warm-Season Native Grasses

Big Bluestem — High yielding native grass that provides excellent late summer forage. Can be used in single species pasture stands or in mixtures with Indiangrass.

Bonanza	i	H B I	i	h s b I	H S B I				
Bonilla	b	—	—	—	h s b i	—	—	h s b i	—
Champ ³	s B i	h S b i	h S B i	h S B i	h S b i	h S b i	h S b	h S b	h s b
Goldmine	—	h B I	—	—	—	H S B I	H S B I	—	H S B I
Kaw	—	h b i	—	—	—	h s b i	h s b i	—	h s b i
Pawnee	i	h b i	i	h s b i	h s b i	h s b i	h s b i	h s b i	h s b i
Rountree	i	i	i	b i	h s b i	h b i	h s b i	h s b i	h s b i

Blue Grama — Will not tolerate dense shade, flooding, a high water table, or acid soils. Grows in definite bunches and reproduces by tillering. Very palatable to livestock all year long and withstands close grazing because of low growing point.

Alma	—	h s b	—	—	—	—	h s b	—	h s b
Bad River	h s b	h s b	h s b	h s b	h s b	h s b	h s b	h s b	h s b
Hachita	H s b	h s b	h s b	h s b	h s b	h s b	h s b	h s b	h s b
Lovington	h s b	h s b	h s b	h s b	h s b	h s b	h s b	h s b	h s b

Buffalograss — Low yielding sodforming grass that spreads by stolons. Good for use between tree and windbreak plantings.

Bison	H b	h b	—	—	h b	h b	h b	h b	h b
Cody	H b	h b	—	—	h b	h b	h b	h b	h b
Plains	H b	h b	—	—	h b	h b	h b	h b	h b
Sharp's Improved	H b	h b	—	—	h b	h b	h b	h b	h b
Tatanka	h b	h b	—	—	h b	h b	h b	h b	h b
Texoka	h b	h b	—	—	h b	h b	h b	h b	h b

Eastern Gamagrass — High yielding native grass that is usually planted in single species stands with a corn planter.

Pete	—	—	—	—	—	—	h B I w	—	h B I w
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Warm-season Native Grasses

Indiangrass — High yielding native grass that provides excellent late summer forage. Can be used in single species pasture stands or in mixtures with big bluestem.

Cheyenne	—	biw	—	—	—	—	biw	—	—
Chief	—	—	—	HSBIw	HSBIw	HSBIw	—	HSBIw	—
Holt	biw	hsbiw							
Nebraska 54	—	biw	—	biw	biw	hsbiw	hsbiw	hsbiw	hsbiw
Osage	—	—	—	—	—	—	hsbiw	—	—
Oto	—	biw	—	—	—	hsbiw	hsbiw	hsbiw	hsbiw
Rumsey	—	—	—	—	—	—	hbiw	hsbiw	hsbiw
Scout	—	bI	—	HBI s	—	HSBIw	HSBIw	—	HSBIw
Warrior	—	bI	—	—	—	—	HSBIw	—	hsbiw

Little Bluestem — Bunchgrass that is normally used in mixtures on rangeland.

Aldous	—	b	—	—	—	hsb	HSB	hsb	hsb
Blaze	sb	sb	—	—	hsb	SB	hsb	hsb	hsb
Camper	sb	hsb	sb	sb	HSB	HSB	hsb	hsb	hsb
Cimarron	HSB	HSB	HSB	HSB	—	hsb	hsb	—	—
Pastura	hsb	—	—						

Prairie Sandreed — Best adapted to sandy sites and spreads by rhizomes. Use in mixtures only.

Goshen	HSb	HSb	HSb	hsb	s	hsb	hsb	—	—
Pronghorn	HSb	HSb	HSB	HSb	S	HSb	HSb	—	—

Sand Bluestem — Excellent forage for livestock. Use in mixtures only.

Champ ³	sBi	hsbi	hsbi	hsbi	hsbi	hsbi	HSb	HSb	hsb
Garden County	S	Sb	HSBi	HSBi	Sb	Sb	s	s	—
Goldstrike	S	Sb	HSBi	HSBi	Sb	Sb	s	S	—

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Warm-Season Native Grasses

Sand Lovegrass — Excellent forage for livestock. Use only in mixtures because it can be short-lived.

Bend	—	S b i	—	—	—	—	S b i	—	—
Nebraska 27	S b i	S b i	h S b i	h S b i	S b i	h S b i	h S b i	h S b i	h S b i

Sideoats Grama — A medium-size bunchgrass which stays green longer than other gramas and can be grazed for a longer period. Use in mixtures only.

Butte	H b i	H b i	H b i	h b i	h b i	h b i	h b i	h s a	h b i
El Reno	—	h s b i	—	—	—	—	h s b i	—	h s b i
Pierre	h b i	—	h b i	h b i	h s b i	—	—	h s	—
Trailway	—	b i	—	H b i	H b i	H b i	H s b i	H s b i a	H s b i

Switchgrass — High yielding native grass that establishes easy and provides excellent forage in late spring through early summer. Becomes coarse and unpalatable to livestock later in the summer. Forage can be toxic to horses and sheep if pure stands of switchgrass are grazed.

Blackwell	—	h s b i w	h s b i w	h s b i w	h s b i w	h s b i w	h s b i w a	h s b i w a	h s b i w a
Cave-in-Rock	i	i	i	i	i	h b i w	s b i w	h s b i w	h s b i w
Forestburg	—	—	—	h s b i w	h s b i w a	—	—	h s b i w a	—
Kanlow	—	w	—	—	—	—	b i w a	—	b i w a
Nebraska 28	h s b i w	s b i w	h s b i w	h s b i w	h s b i w a	h s b i w	h s b i w	h s b i w a	—
Pathfinder	i	h s b i w	h s b i w	h s b i w	h s b i w a	h s b i w	h s b i w a	h s b i w a	h s b i w a
Shawnee	I	I	I	I	I	H B I W	H S B I W	H S B I W	H S B I W
Sunburst	—	—	—	—	h s b i w a	—	—	h s b i w a	—
Trailblazer	i	H s B i w	h s B i w	H S B I w	H S B I w a	h s b i w	h s b i w a	h s b i w a	h s b i w a

- 1 Adapted varieties may be available (especially of smooth brome and orchardgrass) that are not listed here because of limited information or commercialization. As additional information becomes available adapted varieties will be added.
- 2 Land resource areas are shown and identified by the attached MLRA map. Select varieties for use in each region and resource area are described below: H = hardlands, S = sands, B = bottomlands (moderately and somewhat poorly drained soils), I = irrigated, W = poorly and very poorly drained soils, A = alkali and saline. (Uppercase bold letters designate varieties preferred for use as forage. Lower case letters indicate varieties adapted to the site for conservation, wildlife, and other uses).
- 3 Cross between sand bluestem and big bluestem from both sandy and hardland sites. Fits well on fields with variable soils (sandy and hardland).