TABLE 1

SPECIES	ORIGIN	SEEDS/LB ¹	LBS/ACRE ²	COOl/WARM ³	CULTIVARS
			FOR FULL	IRR/DRY	
			SEEDING	SPRING/FALL	
Grasses	-			•	
alkali sacaton	Ν	1,758,000	0.5	W/D/NP	Salado
bluegrass, big	N	882,000	3	W/D/NP	Sherman
bluegrass, Canada	I	1,600,000	<mark>1.0</mark>	C/I/NP	Foothills, Reubens
bluegrass, Canby	N	900,000	1.0	C/D/NP	Canbar
bluegrass, Kentucky	N	2,156,000	3	C/I/NP	Troy
bluegrass, Sandberg	N	<mark>900,000</mark>	<mark>1.0</mark>	C/D/NP	High Plains
bluestem, big	N	130,000	4	W/D/S	Bison, Bonilla, Champ
bluestem, little	N	260,000	4	W/D/S	Blaze, Camper, Badlands
bluestem, sand	N	113,000	6	W/D/S	Garden, Goldstrike
bromegrass, smooth	Ι	125,000	5	C/I or D/NP	Lincoln, Manchar
bromegrass, meadow	Ι	93,000	7	C/I or D/NP	Regar, Fleet, Paddock, Montana
bromegrass, mountain	N	80,000	10	C/I or D/NP	Bromar, Garnet
buffalograss	N	335,360	5	W/D/NP	Bison, Plains, Tatanka, Bismarck
fescue, hard	N	565,000	3	C/D/NP	Serra, Durar
fescue, Idaho	N	450,000	3	C/D/NP	NezPerce, Joseph
fescue, sheep	N	680,000	3	C/D/NP	Covar, Big Horn
fescue, spike	N	200,000	4	C/D/NP	common
fescue, tall	Ι	242,000	4	C/I or D/NP	Alta, Kenmont, Fawn
foxtail, creeping	Ι	720,000	3	C/I/NP	Garrison, Retain
foxtail, meadow	Ι	500,000	4	C/I/NP	common
galleta	N	159,000	4.0	W/D/NP	Viva
grama, blue	N	825,000	1	W/D/S	Alma, Bad River, Lovington
grama, sideoats	N	191,000	4.5	W/D/S	Butte, Pierre, Trailways
hairgrass, tufted	N	2,500,000	1.5	C/D/NP	Peru Creek
Indiangrass	Ν	170,000	5	W/D/NP	Tomahawk
Indian ricegrass	Ν	235,000	6	C/D/F	Nezpar, Paloma, Rimrock
needleandthread	Ν	115,000	6	C/D/NP	common
needlegrass, green	Ν	186,000	6	C/D/F	Lodorm
nuttall alkaligrass	Ν	2,108,000	0.5	C/I/NP	common
orchard grass	Ι	464,000	4	C or D/NP	Paiute
orchard grass	Ι	650,000	2	C/D/NP	Profile
orchard grass	Ι	464,000	4	C/I/NP	Chinook, Latar, Potomac
prairie cordgrass	N	183,000	6	W/D/NP	Red River
prairie junegrass	N	2,315,000	0.5	C/D/NP	common
prairie sandreed	N	273,000	4	W/D/S	Goshen
reed canarygrass	N	602,000	4	C/I/NP	common
ryegrass, perennial	Ι	247,000	4	C/I or D/NP	Friend, Linn
sand dropseed	Ν	5,680,000	0.5	W/D/NP	common

¹ Seeds per linear foot calculations:

<u>Seed/Lb x Bulk Seeding Rate x Row Spacing (In.)</u> = Seeds/Linear Foot 12 In.

43,560

² All seeding rates are shown for12" spacing. For row spacing wider than 12", calculate seeding rates by:

(Lb. PLS/Ac) x (12" divided by actual row spacing) = Actual Lb. PLS/Ac

 $^{^{3}}$ C = Cool Season, W = Warm Season, I = Irrigated, D = Dryland, S = Spring Preferred Seeding, F = Fall Preferred Seeding, NP = no seasonal seeding preference. In general, spring seedings are preferred in Wyoming, particularly on dryland sites.

Plant Materials Technical Note #3

SPECIES	ORIGIN	SEEDS/LB	LBS/ACRE FOR FULL	COOI/WARM IRR/DRY	CULTIVARS
			SEEDING	SPRING/FALL	
Grasses cont'd	1 1				
squirreltail, bottlebrush	Ν	192,000	5.0	C/D/NP	Sand Hollow
switchgrass	Ν	389,000	2.5	W/I/S	Dacotah, Forestburg, Sunburst
timothy	Ι	1,300,000	2	C/I/NP	Climax, Drummond
wildrye, Altai	Ι	80,000	12	C/D/NP	Prairieland, Eajay, Pearl
wildrye, basin	Ν	125,000	6	C/D/NP	Magnar, Trailhead
wildrye, beardless	Ι	181,000	6	C/D/F	Shoshone
wildrye, Canada	Ν	115,000	6	C/D/NP	Mandan
wildrye, Mammoth	Ι	47,000	10	C/DNP	Volga
wildrye, Russian ⁴	Ι	170,000	6	C/I or D/NP	Vinall, Swift
wildrye, Russian ⁴	Ι	134,000	6	C/I or D/NP	Bozoisky Select, Mankota
Wheatgrasses					E de la companya de
beardless	N	109,000	6	C/D/NP	Whitmar
bluebunch	N	139,000	7	C/D/F	Secar, Goldar, Whitmar
Crested, fairway	Ι	200,000	4	C/D/NP	Fairway, Summit, Douglas
hybrid (quack x bluebu)	Ι	134,000	8	C/I or D/NP	Newhy, Ruff
intermediate	Ι	79,000	7	C/I or D/NP	Greenar, Oahe, Rush, Reliant
pubescent	Ι	80,000	7	C/I orD/NP	Luna, Manska
siberian	Ι	163,000	6	C/D/NP	P-27, Vavilov
slender	N	140,000	6	C/D/NP	Pryor, Revenue, San Luis
standard crested	Ι	188,000	5	C/D/NP	Nordan, Douglas
standard x fairway	Ι	175,000	5	C/D/NP	Hycrest, CDII
streambank	N	152,000	5	C/D/NP	Sodar
tall	Ι	79,000	10	C/D/NP	Alkar, Jose, Orbit
thickspike	N	145,000	5	C/D/NP	Bannock, Critana
western	Ν	93,000	6	C/D/NP	Arriba, Rodan, Rosana ⁵
Introduced Legumes					
alfalfa ⁶	Ι	225,000	5	N/A/I or D/NP	see footnote #6
alsike clover	Ι	700,000	4	N/A/ I or D/NP	common
birdsfoot trefoil	Ι	418,000	5	N/A/ I or D/NP	Empire, Leo
ladino clover	Ι	800,000	3	N/A/ I or D/NP	common
milkvetch, cicer	Ι	134,000	7	N/A/ I or D/NP	Lutana, Monarch, Windsor
red clover	Ι	272,160	6	N/A/ I or D/NP	common
sainfoin	Ι	18,500	34	N/A/ I or D/NP	Eski, Melrose
sweetclover, white	Ι	262,000	4	N/A/ I or D/NP	common
sweetclover, yellow	Ι	258,000	4	N/A/ I or D/NP	common

 ⁴ Minimum row spacing (width) is 18 inches
⁵ Arriba is acceptable in the southern half of Wyoming. Barton or Rodan are also acceptable in Major Land Resource

Areas 60, 64, and 67. ⁶ Alfalfa should have a Fall Dormancy rating of three (3) or less. See the latest Certified Alfalfa Seed Council Fall Dormancy and Pest Resistance Ratings for alfalfa varieties.

ORIGIN

Ν

SPECIES

Native Forbs and

Legumes dotted gayfeather

SEEDS/LB	LBS/ACRE FOR FULL SEEDING	COOI/WARM IRR/DRY SPRING/FALL	CULTIVARS
136,000	6.4	N/A/D/NP	Nebkan
286,690	5	N/A/D/NP	Appar
<mark>250,000</mark>	<mark>.1</mark>	W/D/NP	Prairie Gold, Medicine Cre
737,000	1.2	N/A/D/NP	Bismarck
275.000	3	N/A/D/NP	Kaneh Bismarck

Lewis flax	Ν	286,690	5	N/A/D/NP	Appar
Maximilian sunflower	N	250,000	<mark>.1</mark>	W/D/NP	Prairie Gold, Medicine Creek
prairie coneflower	N	737,000	1.2	N/A/D/NP	Bismarck
purple prairieclover	Ν	275,000	3	N/A/D/NP	Kaneb, Bismarck
small burnet	Ν	42,243	20	N/A/D/NP	Delar
white prairieclover	Ν	278,000	3	N/A/D/NP	Antelope
Shrubs/Trees					
American plum	Ν	870	20	N/A	common
antelope bitterbrush	Ν	15,400	1.0-2.0	N/A	common
big sagebrush	Ν	$2.4-3.2 \times 10^6$	1	N/A	common
black cottonwood	Ν	NI	N/A	N/A	common
black hawthorn	Ν	22,600	0.5-1.0	N/A	common
box elder	Ν	13,400	0.25-0.5	N/A	common
bur oak	Ν	75	25	N/A	common
chokecherry	Ν	4,790	1.0-2.0	N/A	common
common juniper	Ν	36,500	<1.0	N/A	common
common snowberry	Ν	76,000	1.0-3.0	N/A	common
cudweed sagewort ⁷	Ν	$3.0-4.5 \ge 10^6$	< 0.25	N/A	Summit
curlleaf mt. mahogany	Ν	51,900	1	N/A	common
fourwing saltbush	Ν	49,000/24,500 ⁸	5/10	NA	Wytana
Gardner's saltbush	Ν	111,500	0.5	N/A	common
green ash	Ν	17,260	< 0.25	N/A	common
green rabbitbrush	Ν	782,000	< 0.5	N/A	common
green sagewort	Ν	$4.5-4.7 \ge 10^6$	< 0.5	N/A	common
horizontal juniper	Ν	29,500	<1.0	N/A	common
narowleaf cottonwood	Ν	NI	NI	N/A	common
Ponderosa Pine	N	<mark>12,595</mark>	<mark>N/A</mark>	NA	Hunter Select
Plains cottonwood	Ν	350-447,000	N/A	N/A	common
redosier dogwood	Ν	18,500	1	N/A	common
Rocky Mountain Juniper	Ν	27,100	<1.0	N/A	Bridger Select
rubber rabbitbrush	Ν	693,000	<1.0	N/A	common
serviceberry	Ν	82,000	0.5-1.0	N/A	common
shrubby cinquefoil	Ν	>1,000,000	<1.0	N/A	common
silverberry	Ν	3,800	1.0-2.0	N/A	common
skunkbush sumac	N	20,300	1.0-2.0	N/A	common
western snowberry	N	74,400	1.0-3.0	N/A	common
willow	Ν	$2-3 \times 10^6$	N/A	N/A	common
winterfat	Ν	111-210,000	<1.0	N/A	Open Range
Wood's rose	Ν	50,000	0.5-1.0	N/A	common
yucca	Ν	25,000	<1.0	N/A	common

⁷ Also known as Louisiana sagewort ⁸ dewinged/winged

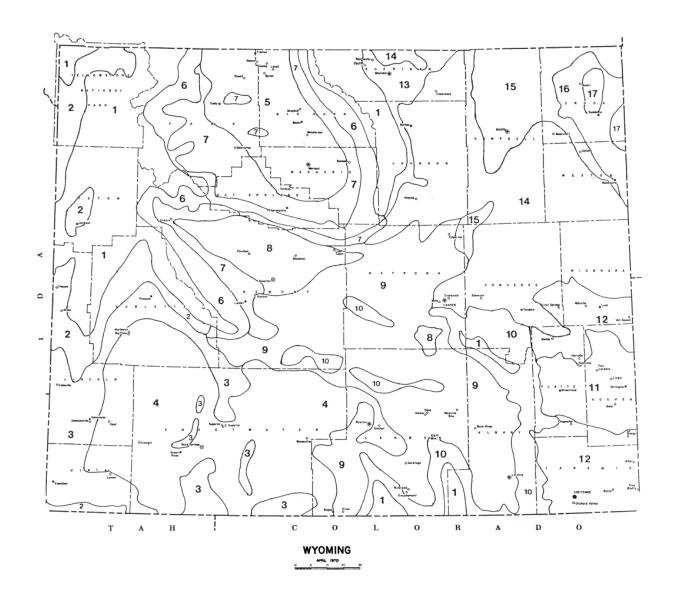


FIGURE 1 - PRECIPITATION ZONES FOR DRYLAND SEEDING DATES 9

⁹ All zones have inclusions. Use local knowledge

TABLE 2

ZONE	PRECIPITATION	SEEDING DATE
1	20"+	Anytime except 8/20 to 9/20
2	15 – 19"	Anytime except 8/20 to 9/20
3	10-14"	9/20 to 5/20
4	7 – 9"	9/20 to 5/1
5	5 - 9"	10/15 to 4/15
6	15 – 19"	8/20 to 9/20
7	10-14"	10/1 to 5/15
8	5 - 9"	10/15 to 4/15
9	10-14"	10/1 to 5/15
10	15 – 19"	Anytime except 8/20 to 9/20
11	12 – 14"	10/25 to 5/1
12	15 – 17"	10/15 to 5/10
13	15 – 19"	10/25 to 5/20
14	10-14"	10/25 to 5/1
15	15 – 17"	10/25 to 5/20
16	15 – 19"	10/15 TO 5/25
17	20-24"	Anytime except 8/20 to 9/20

DRYLAND SEEDING DATES BY PRECIPITATION ZONE

TABLE 3

Location	Anytime Except:
Afton	August 1 to September 20
Baggs	August 1 to September 20
Buffalo	August 5 to October 25
Casper	August 5 to October 1
Cheyenne	August 15 to October 15
Cody	August 5 to October 15
Cokeville	August 1 to September 20
Douglas	August 5 to October 25
Dubois	August 5 to October 1
Farson	August 1 to September 20
Gillette	August 10 to October 25
Greybull	August 10 to October 15
Jackson	August 1 to September 20
Каусее	August 1 to October 25
Lander	August 15 to October 1
Laramie	August 1 to September 20
Lovell	August 10 to October 15
Lusk	August 5 to October 15
Lyman	August 1 to September 20
Medicine Bow	August 1 to October 1
Newcastle	August 15 to October 25
Pinedale	August 1 to September 20
Powell	August 10 to October 15
Riverton	August 15 to October 15
Saratoga	August 1 to September 20
Sheridan	August 10 to October 25
Sundance	August 5 to October 15
Thermopolis	August 10 to October 15
Torrington	June 1 to Aug 10 & Sep 1 to Oct 25
Wheatland	June 1 to Aug 10 & Sep 1 to Oct 25
Worland	August 10 to October 25

IRRIGATED PASTURE AND HAYLAND SEEDING DATES

Data from Wyoming Climate Atlas by Brooks (in cooperation with Wyoming Water Resources Center, University of Wyoming). Approximately 6 weeks prior to fall 32-degree F mean.