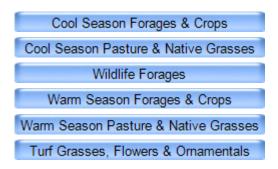
Planting Chart

This table is intended to give some general planting information for seed that we carry.

For more specific information, please go to the <u>Links</u> page, where we have listed

some excellent web sites and web pages that offer much more information.



		Cool	Season	Forage	s and Crops	
Kind	Lbs. per Bushel	Planting Rate Lbs/Acre Broadcast	Planting Depth	Planting Dates	Adaptation	Comments
Alfalfa	60	25-30, or drill 20-25	1/4-1/2	Sept- Oct*, Feb-Mar	Deep, well- drained loam to clay loam soil with pH of 7 or higher	Excellent high-protein hay or forage. Check dormancy ratings of different varieties for winter hardiness and adaptation. Proper fertility, pH and well drained soils critical to high forage yields and stand longevity.
Barley	48	75-80, or drill 65-75	1-2	Sept- Oct	Soils with high pH; sensitive to acidic soils	Not susceptible to Karnal bunt. Makes good quality feed grain and forage. Of the cereal grains, most tolerant to saline and alkaline soils. Not adapted to very sandy soils.
Clover, Arrowleaf	60	8-10	1/4-1/2	Sept- Oct*	Sandy loam soils, pH 6.0- 7.0, good drainage	
Clover.	60	12-16	1/4-1/2	Sept-	Loams and	Poor cold tolerance. Does

Berseem				Oct*	clays, pH 6.5- 8.5, poor drainage	best in creek and river bottoms. Poor reseeding potential. Low bloat potential.
Clover, Crimson	60	16-20	1⁄4-1⁄2	Sept- Oct*	Sandy loams and clays, pH 6.0-7.0, good drainage	Good cold tolerance. Excellent reseeding vigor, but low percentage of hard seed. Best early forage production of the annual clovers. Earliest maturing clover.
Clover, Red	60	10-12	1/4-1/2	Sept- Oct*	Loams and clays, pH 6.5- 8.0, good drainage	Good cold tolerance. Weak perennial. Spring growth begins later and continues longer than the annual clovers. Upright growth for good hay. Late growth causes it to compete with perennial warm-season grasses.
Clover, Rose	60	12-16	1⁄4-1⁄2	Sept- Oct*	Loams, clays, and sandy soils, pH 6.0- 8.0, good drainage	Good cold tolerance. Good reseeder, but seedling vigor is poor. More productive and persistent than the other clovers in north central Texas and central Oklahoma.
Clover, Subterranean	60	16-20	1⁄4-1⁄2	Sept- Oct*	Loams and clays, pH 6.0- 7.3, fair drainage	Fair cold tolerance, poor drought tolerance. Tolerates close grazing because of low growth habit.
Clover, White	60	3-4	1⁄4	Sept- Oct*	Loams and clays, pH 6.0- 7.5, poor drainage	Good cold tolerance. Excellent reseeder. Does best in creek and river bottoms. Slow initial growth.
Clover, White Ladino	60	1-4	1⁄4	Sept- Oct*	Loams and clays, pH 6.0- 7.5, poor drainage	Larger, more robust type of white clover. Good cold tolerance. Does best in creek and river bottoms. Slow initial growth.
Oats, Winter	32	75-85, or drill 65-75	1-2	Sept- Oct	Widely adapted.	Many varieties available with different characteristics (cold tolerance, seed yield, forage production). Excellent and highly palatable hay and forage for livestock and deer. Fair tolerance to wet soils.

Peas, Field (Austrian Winter)	60	40-50, or drill 30	1⁄2-1	Sept- Oct	Widely adapted. Best in well- drained soils.	Good cold tolerance. Excellent soil builder. High protein hay or forage for livestock and deer.
Pea, Singletary (Roughpea)	55	15-20	1⁄2-1	Sept- Oct	Widely adapted.	Similar in appearance to vetch. Persistence is due to high percentage of hard seed produced.
Rape		3-5	1/4	Sept- Oct	Widely adapted.	Good cold tolerance. Large leaves and stems. Nutritious and palatable forage for livestock and deer.
Rye	56	100-120, drill 80- 100	1-2	Sept- Nov	Widely adapted.	Good forage and hay. Best cold tolerance of the small grains. Produces more fall than spring forage. Most productive cool season annual grass on soils low in fertility, well drained, and sandy.
Sweetclover, White (Hubam)	60	12-16	1⁄4-1⁄2	Feb-Mar	Loams and clays, pH 6.0- 8.0, good drainage	Good drought tolerance. Produces tall, stemmy growth. Best for soil improvement, grazing, hay and honey production. White-flowered annual.
Sweetclover, Yellow Blossom (Madrid)	60	12-16	1⁄4-1⁄2	Feb-Mar	Loams and clays, pH 6.0- 8.0, good drainage	Good drought tolerance. Shorter growth, more leaves, and finer stems than Hubam. Best for soil improvement, grazing and hay production. Yellow- flowered biennial.
Tall Wheatgrass		10-15	1⁄4-3⁄4	Sept- Oct	Very tolerant of saline & moist alkaline soils	Late-maturing perennial bunchgrass. Fair to good hay and forage production under irrigation.
Triticale		90-110, or drill 75-90	1-2	Sept- Oct	Widely adapted.	Cross between wheat and rye, combining the cold tolerance and disease resistance of each. May produce more forage than wheat or rye alone.
Turnips		3-5	1/4	Sept- Oct	Well-drained soil, pH 5.2- 6.8	Good cold tolerance. Produces large, bulbous root. Nutritious and palatable forage for livestock and deer.
Vetch, Hairy	60	20-25,or drill 15-20	1⁄2-1	Sept- Oct	Widely adapted.	Good cold tolerance. Good re-seeding/seedling viaor. Exceptional soil

						builder. High protein forage/hay.
Wheat, Winter	60	90-110, or drill 75-90	1-2	Sept- Oct	Widely adapted.	Many varieties available with different characteristics. Good hay and forage for livestock and deer. Moderate cold tolerance, relative to the cereal grains. Better on wet, heavy soils than rye.

* May also be planted from February through early March. Early fall plantings are preferred over spring planting because of less severe weed problems and generally more favorable climatic conditions for seedling establishment.

	Cool Season Pasture & Native Grasses									
Kind	Lbs. per Bushel	Planting Rate Lbs/Acre Broadcast	Planting Depth	Planting Dates	Comments					
Bromegrass, Matua		25-30	1⁄4-1⁄2	Sept- Oct	Short-lived perennial bunchgrass. 2-4 ft. tall. Requires high fertility and moisture for grazing and hay.					
Fescue, Tall	24	20-25	1⁄4-1⁄2	Sept- Oct	Shade tolerant, deep-rooted bunchgrass. 2-4 ft. tall. Perennial if it lives through summer. Plant endophyte-free fescue for grazing. Best on loam or clay soils. Tolerant of wet conditions, but not flooding.					
Ryegrass, Annual	24	25-30	1⁄4-1⁄2	Sept- Oct	High forage producer; used either in pure stand or to overseed a warm season permanent pasture for cool season grazing. Tolerant of wet conditions. Adapted to wide range of soils.					
Ryegrass, Perennial	24	25-30	1⁄4-1⁄2	Sept- Oct	Similar to annual ryegrass; will act as perennial if it lives through the summer.					

Wildlife Forages (See other tables for additional items.)

Kind	Planting Rate Lbs/Acre Broadcast	Planting Depth	Planting Dates	Adaptation	Comments
Alyceclover	15-20	1⁄4-1⁄2	Mar-May	Not sensitive to soil pH.	Annual legume with fairly upright growth and relatively large leaves. Good summer browse for deer.
Buckwheat	50-60	1-1½	Apr-July	Widely adapted.	Annual. Produces abundant seed. Good for game birds and deer. Can be flooded. 70-80 dav

					maturity.
Chufa	50	1½-2	Apr-June	Fertile sandy and loam soils.	Excellent for turkey. The tuber (like peanuts, but with no shell) is scratched up and eaten. 100-120 day maturity.
Chicory	5	1⁄4-1⁄2	Sept-Oct	Fertile, well- drained soils, pH of 5.5 or greater.	Perennial herb. Good digestibility and mineral content. Utilized by deer and turkey.
Cowpeas	50-60	1-2	Apr-July	Widely adapted.	Annual. High in protein and very palatable to deer; seed for quail. Summer plantings with available moisture.
Illinois Bundleflower	5	1⁄4-3⁄4	Mar-May	Good in loams and clays, fair in sandy soils.	Native, perennial, legume. 3-4 ft. tall. Provides food and cover for wildlife. High in protein.
Jointvetch (Aeschynomene)	15-20	1-1½	Apr-May	Moist, fertile soils. Tolerant of very wet conditions.	Reseeding annual legume. 3-6 ft. tall. Excellent for deer, duck, dove, quail. Best in wet land subject to flooding.
Lab Lab	20-25	1-3	Apr-May	Sandy loams to clays, pH of 5- 7.5.	Good heat and drought tolerance. High protein. Row-cropping and protection during establishment recommended.
Lespedeza	20-30	1⁄2-1	Mar-May	Areas east of I- 35. Tolerant of acidity and low Phos.	Several different species. Good food and cover for quail and turkey. Plant in patches/strips near brush, woods and water.
Millet, Browntop	25-30	1⁄4-1⁄2	Apr-July	Widely adapted.	Annual. 60 day maturity. 2-4 ft. tall. Excellent for all birds. Produces abundant seed. Reseeds easily and quickly.
Millet, Dove Proso	30-40	1⁄4-1⁄2	Apr-July	Widely adapted.	Annual. 3-6 ft. tall. Excellent for all game birds. Plants bend to ground as seed matures. 70-75 day maturity.
Millet, Japanese	25-35	1⁄4-1⁄2	Apr-Sept	Widely adapted. Tolerant of flooding.	Annual. 3-5 ft. tall. Excellent for all game birds, but best for waterfowl when flooded. 60-90 day maturity.
Partridge Peas	10-15	1/4-1/2	Apr-July	Widelv	Annual reseeding legume.

				adapted. Can be found growing wild.	1-6 ft. tall. Excellent food and cover for quail and other game birds. 110 day maturity.
Sesame	10-15	1⁄4-1⁄2	Apr-July	Widely adapted. Best on fertile loams.	Annual. 4-6 ft tall. Slowly shatters great quantities of oily seed. Excellent for all game birds.
Sorghum, White Game Milo	20-30	1-2	Apr-July	Widely adapted.	Annual. Birds will not eat the seed until it has dried. 3-4 ft. tall. 90-100 day maturity.
Soybean, Laredo	50-60	1-2	May- June		Annual forage-type soybean. Excellent spring/summer protein for deer. Good palatability. Birds relish the seed.
Sunflower, Maximilian	3-4	1⁄4-1⁄2	Apr-May	Widely adapted. Can be found growing wild.	Native, perennial. 3-9 ft. tall. Provides food and cover for all wildlife.
Sunflower, Native (Common)	10	1⁄4-1⁄2	Dec-July	Widely adapted. Can be found growing wild.	Persistent reseeding annual. Excellent for all birds. High % of dormant seed. Best results when planted in winter.
Sunflower, Peredovik-type	25-30	1⁄2-3⁄4	Apr-June	more productive	Annual. 4-5 ft tall. 100 day maturity. High oil content. Excellent for dove and quail; browsed heavily by deer.

Warm Season Forages and Crops

Kind	Lbs. per Bushel	Broadcast	Drilled	In Rows	Planting Depth	Planting Dates	Comments
Corn, Field	56			8-20	1-2	Mar-Apr	Annual. Many hybrids available with different characteristics. Planting rates vary with seed size, desired population and row width.
Cowpeas	60	40-50	30	15-20	1-2	Apr- July	Annual. Many types and varieties available. Used for hay, forage, wildlife. soil

							building, human consumption. High-protein forage.
Early Sumac ("Red Top Cane")	50	75-80	60-65		1-2	Apr- June	Annual. Seed is high in tannin and unpalatable to livestock. Crop needs to be utilized before seed is mature.
Hegari	56	85-90	70-75		1-2	Apr- June	Annual. Useful as hay crop. Produces soft, white seed that is readily utilized by all classes of livestock.
Johnsongrass	40	25-30	15-20		1⁄2-1	Apr- July	Perennial; extremely persistent and hardy. Highly preferred by livestock and an excellent forage; risk of prussic- acid poisoning and nitrate toxicity.
Millet, German Strain R (Foxtail)	50	30-40	25-30		1⁄2-1	May- Aug	Annual grass. 1-5 ft tall. 75-90 day maturity. Makes excellent hay. Also valuable for erosion control.
Millet, Hybrid Pearl	50	30-40	25-30		1⁄2-1	May- July	Annual that grows 6 ft. tall or more. Tillers profusely. Excellent forage and hay, especially for horses. Risk of nitrate toxicity.
Mungbeans		40-50	25-30	15	1-2	Apr- July	Annual legume. Tall growth with less leaf matter than Cowpeas. Very quick maturity. Good short season hay crop.
Sorghum Almum	40	25-30	15-20		1∕₂-1	Apr- July	Annual. Natural hvbrid between

							Johnsongrass and sorghum. Wider leaves and larger stems than Johnsongrass, but not as persistent. Risk of prussic acid poisoning and nitrate toxicity.
Sorghum, Hybrid Forage	56	40-50 (Greenchop)	20 (Ensilage)	10-15 (Ensilage)	1-2	Apr- July	Annual that grows 7-8 ft. tall. Good hay and forage. Good heat/drought tolerance. Risk of prussic acid poisoning and nitrate toxicity.
Sorghum, Grain ("Milo")	56		5-12	5-10	1-2	Apr- July	Annual. Many hybrids available with different characteristics. For grain and hay. Risk of prussic acid poisoning and nitrate toxicity.
Sorghum Sudangrass, Hybrid	56	60-80	50-65		1-2	Apr- July	Annual. Many hybrids, i.e. late- maturing, photo- period sensitive and brown mid- rib. Used for hay and forage. Risk of prussic-acid poisoning and nitrate toxicity.
Soybean	60		50-60	40-50	1-2	May- June	Annual legume. Available in forage or grain types. Many hybrids available. High in protein. For hay, soil-building, and animal feed.
Sudangrass	40	40-50	30		1-1½	Apr- July	Annual. Many varieties available with different characteristics. Used for hay, and forage.

	Warm Se	eason	Pastur	e and Native	e Grasses
Kind	Planting Rate Lbs/Acre Broadcast	Planting Depth	Planting Dates	Adaptation	Comments
Bahiagrass	15-20	1/4-1/2	Apr- July	pH 6.0-6.5. Widely adapted.	Deep-rooted perennial; forms dense tough sod. Used for forage and hay. Some wildlife value.
Bermudagrass	8-12 Unhulled 5-10 Hulled	1/4	Apr- July*	pH 5.5-7.0 Widely adapted. Best on fertile well- drained soil.	Long-lived perennial, sod- forming. Excellent drought tolerance and durability. Very persistent. Many varieties available with different characteristics (cold and drought tolerance, forage production).
Blue Grama	1-2 pls	1/4	Apr- May	Good in loams and clays, Fair in sandy soils.	Good drought and cold tolerance, fair salt tolerance. Native, perennial bunchgrass. 1-2 ft tall. Very palatable. Best west of I-35.
Bluestem, Big	3-5 pls	1/4	Apr- May	Good in loams, fair in clays and sandy soils.	Good cold tolerance, fair drought and salt tolerance. Native, perennial bunchgrass. 3-6 ft tall. Good and palatable forage producer. Excellent cover for wildlife.
Bluestem, K.R. (King Ranch)	1-2 pls	1/4	Apr- May	Good in loams and clays, poor in sandy soils.	Good drought and cold tolerance, fair salt tolerance. Introduced, perennial bunchgrass. Hardy. Quick growth, aggressive spreader. Not much value as forage or hay, and no value for wildlife.
Bluestem, Little	3-4 pls	1/4	Apr- May	Good in loams, clays and sandy soils.	Good cold tolerance, fair drought tolerance, poor salt tolerance. Native, perennial bunchgrass. 2-4 ft tall. Good and palatable forage producer. Excellent cover for quail.
Bluestem, Yellow (Plains, WW Spar)	2 pls	1/4	Apr- May	Good in loams, fair in clays and sandy soils.	Good cold tolerance, fair drought and salt tolerance. Introduced. Excellent forage and hay with good management.
Bluestem, WW B Dahl	1-2 pls	1/4	Apr- May	Good in loams and clays, Fair in sandy soils.	Good drought tolerance, fair cold and salt tolerance. Introduced. Excellent forage/hav with good

					management. Best south of I- 20.
Buffalograss	5-10 pls	1/4	Apr- May	Good in clays and loams, Poor in sandy soils.	Good drought and cold tolerance, fair salt tolerance. Native, perennial that is low- growing and persistent.
Crabgrass	5 pls	1/4	Apr- June	Widely adapted.	Good drought tolerance. Good reseeder. Annual. Persistent. Valuable as a forage; highly palatable to livestock.
Dallisgrass	10-15 pls	1/4-1/2	Apr- July	Widely adapted.	Good drought tolerance. Persistent, deep-rooted perennial bunchgrass. 2-4 feet tall.
Green Sprangletop	2 pls	1/4	Apr- May	Good in loams and sandy soils, Fair in clays.	Good drought and cold tolerance, fair salt tolerance. Native, perennial bunch grass. 1-3 ft tall. Good and palatable forage producer. Good cover and source of seed for wildlife.
Indiangrass	3-4 pls	1/4	Apr- May	Good in loams and sandy soils, Fair in clays.	Good cold tolerance, Fair salt tolerance, Poor drought tolerance. Native, perennial bunchgrass. 3-8 ft tall. Extremely palatable and highly preferred by livestock. Good cover for wildlife.
Kleingrass	2-3 pls	1/4	Apr- May	Good in loams and clays, Fair in sandy soils.	Fair drought and salt tolerance, Poor cold tolerance. Introduced, perennial bunchgrass. 3-4 ft tall. Excellent forage and hay with good management. Good cover and source of seed for wildlife.
Lovegrass, Weeping	3-5	1/4	Apr-Jun	Good in loams and clays; best in sandy soils.	Fair drought, cold and salt tolerance. Introduced, perennial bunchgrass. Grows 2-5 ft tall. Used for hay and erosion control.
Sideoats Grama	4-6 pls	1/4	Apr- May	Good in loams and clays, Fair in sandy soils.	Good cold tolerance, fair drought and salt tolerance. Native, perennial. Medium-tall bunchgrass, 1½-3 ft tall. Good and palatable forage producer. Excellent cover for quail.
Switchgrass	3-4 pls	1/4	Apr- May	Good in loams, clays and sandy soils.	Good cold tolerance, fair drought and salt tolerance. Native, perennial. 3-6 ft tall. Good and palatable forage

					producer. Excellent cover and source of seed for wildlife	
* Bermudagrass will germinate after soil temperatures reach 65°. However, unbulled bermudagrass can be						

* Bermudagrass will germinate after soil temperatures reach 65°. However, unhulled bermudagrass can be safely planted prior to this and will germinate when soil temperatures reach the appropriate temperature.

Turf Grasses, Flowers and Ornamentals					
Kind	Planting Rate Lbs/1,000ft ²	Planting Depth	Planting Dates	Comments	
Bermudagrass	1–3	1⁄4	Apr-July	Warm-season perennial. Widely adapted. Needs mostly to full sun. Excellent for erosion control, lawns and athletic fields. Ranges from Common to better turf varieties.	
Bluebonnets	1-2	1⁄4-1⁄2	Oct-Nov	Native, warm-season annual. Does well on slopes and soils with good drainage. Needs full sun. Plant in late-summer to fall for spring flowers. Scarification not necessary.	
Buffalograss	2-5	1⁄4	Apr-July	Native, warm-season. Good drought and cold tolerance, fair salt tolerance. Not adapted to sandy soils and high rainfall. Very low maintenance. Persistent. Slow growth rate.	
Centipedegrass	1∕8-1	1⁄4	Apr-July	Adapted to sandy, acid soils of low to moderate fertility. Moderately shade tolerant, but prefers full sun. Not tolerant of heavy traffic. Forms dense turf. Relatively slow growth.	
Crownvetch	1⁄8-1	1/2	Mar-Apr	Perennial legume. Used in erosion control and rocky conditions. Drought tolerant. Does well on all soils. Not tolerant of salt and alkali. May become invasive in turf situations.	
Dichondra	1⁄8-1	1⁄4	Apr-July	Warm season perennial. Low-growing, broad- leaved, carpet-like groundcover. Best in moist, well-drained soils. Fair heat and cold tolerance.	
Fescue, Tall	5-10	1⁄4	Sept- Oct*	Cool-season, but will survive summers in shade under irrigation. Very shade tolerant. Used extensively in yards with too much shade to support other turf grasses.	
Prairie Clover, Purple	1⁄8-1	1⁄4-1⁄2	Mar-Apr	Native, warm-season, perennial legume. Drought tolerant. Used in reclaiming eroded and depleted soils and prairie reclamation projects.	
Ryegrass, Annual	10-15	1⁄4	Sept- Oct*	Cool-season. Used extensively for erosion control and overseeding lawns and athletic fields. Fast rate of establishment. Fast growth rate and recovery after clipping.	
Ryegrass, Perennial	10-15	1⁄4	Sept- Oct*	Cool-season. Although similar to Annual Ryegrass, it has shorter, finer growth and better wear tolerance. Generally makes better	

				quality cool-season turf.	
Zoysia	1⁄8-1	1⁄4	April- May	Warm-season. Moderately shade tolerant. Good drought tolerance. Fair salt tolerance. Needs well-drained soil. Good traffic tolerance, but slow to fill in damaged areas.	
* May also be planted from Feb-Mar. Ryegrasses will persist until approx. June/July, while Fescue will survive through the summer as long as it is irrigated often and/or in shady conditions.					