

THE AGRICULTURAL AND MECHANICAL COLLEGE OF TEXAS TEXAS AGRICULTURAL EXTENSION SERVICE J. E. HUTCHISON, DIRECTOR, COLLEGE STATION, TEXAS

## WINTER TEMPORARY PASTURES

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WINTER TEMPORARY PASTURES are the only dependable source of green grazing in the late fall, winter and early spring. Green grazing permits beef gains and increased milk production during the winter and reduces hay, grain and veterinary bills.

### **ESTABLISHMENT**

Proper seedbed preparation and fertilization are essential for successful temporary pasture production. A soil test is the best means of determining the ratio and amount of fertilizer needed. General recommendations may be obtained from leaflets for specific type of farming areas. (Example, L-227, "Fertilizer Recommendations for the Rio Grande Plain.") When maximum grazing or early grazing is needed and moisture is adequate, use higher rates of fertilizer. Topdress with nitrogen one or more times to stimulate growth as desired when moisture and temperature are favorable.

All small grain seed should be treated with the proper amount and kind of seed fungicide to insure germination and good stands. Legume seed should be inoculated with the proper culture immediately before planting. Use high quality seed.

Small grains should be planted at the proper time to provide grazing as early as possible, even though this may require dusting them in. Some risk is involved with this practice, especially with wheat and rye, and it may increase insects and diseases. If dusted in, these small grains should be planted deep enough to prevent germination with light rains. Legume inoculant may be killed if the seed remain in dry soil for a long period.

Sod seeding of small grains in Bermudagrass is suggested only in areas of high rainfall where the amount of cultivated land available does not allow planting enough winter temporary pasture or in fields where seedbeds may be too wet to graze for long periods. Sod-seeded small grains produce less grazing than those seeded on a prepared seedbed. Sod seedings should be made in November, or after the summer grass is dormant, because of competition from established summer grass for moisture and plant nutrients. The cool-season grass may be kept grazed closely or clipped when it is time for the warm-season grass to begin growth to prevent damage to the summer plants.

#### VARIETIES

Grass and legume recommendations in this publication are for the land resource areas shown on the map. Temperature, moisture and soil differences have been considered.

The recommendations are based primarily on the use of these plants for grazing. Small-grain varieties and dates and rates of seeding are not necessarily the same as for grain production.

Small grain varieties are listed in the order of expected earliness of grazing and not according to expected total production. When two or more varieties have the same degree of earliness, they should be used in the order listed, provided seed supply and cost are not a factor. Rye gives early grazing but is less palatable than oats, barley or wheat. Under most conditions barley should not be planted on soils likely to become waterlogged. Wheat normally does not produce as much early grazing as oats or barley but may produce as much total forage for the season.

Each small grain variety and legume is rated according to degree of earliness of grazing. The symbol indicating degree of earliness is the first letter following the varietal name.

E-Early

I—Intermediate

L-Late

These ratings are relative and will vary with temperature and moisture conditions. With cold weather, the intermediate and late varieties tend to be later in producing grazing. The warmer the weather, the less difference there is among varieties in earliness of grazing. In general, upright-type oats require a heavier seeding rate than the prostrate type because they tiller less. Each variety has been rated as to disease susceptibility. These symbols follow the symbol indicating earliness of grazing.

- C—Susceptible to leaf rust.
- S—Susceptible to stem rust.
- H—Susceptible to Helminthosporium blight.
- M—Susceptible to mildew.

Damage from disease is of greater importance in the southern areas. Diseases are not as great a factor in grazing as in grain production in northern areas. Mustang and other varieties highly susceptible to Helminthosporium blight should not be planted on the same land for 2 years in succession. In addition, rotation greatly reduces damage by winter grain mites.

#### MANAGEMENT

Planting more than one variety or type of small grain is a good practice when maximum grazing is needed. Adapted early types such as Elbon and Gator rye, Goliad barley, and Alamo-X oats may provide grazing 4 to 6 weeks earlier than cold-resistant winter types but usually do not give sustained production through the winter. In areas where these early-producing varieties may be used, about 15 to 20 percent of the planned winter pasture acreage could be seeded to one of the early varieties. The rest of the acreage could be seeded to an intermediate-type oat to provide the bulk of the midwinter to spring grazing.

Small grain should become well established before being grazed. Research of the Texas Agricultural Experiment Station shows that grazing oats too early and keeping them grazed too closely can reduce forage production as much as 70 to 80 percent. Upright growth-type plants such as Alamo-X oats and Goliad barley should be 8 to 10 inches high before being grazed. The more prostrate types like Mustang oats may be grazed when they are 4 to 6 inches high and have established a good root system. The upright types should not be grazed closer than 4 inches, for they make poor regrowth when grazed too short.

None of the small grains will produce well if kept grazed closely. Texas research shows that 4 to 5 weeks are required following clipping for oats to make adequate regrowth for grazing again. Keeping oats grazed short not only reduces production but also increases winterkilling. Rotation grazing to allow ample regrowth between grazings will help insure profitable production from winter temporary pastures.

Forage not needed for grazing should be utilized as hay or silage. In areas A, B and C, spring rainfall often prevents making good quality hay and excess forage can be utilized best as silage.



#### LAND RESOURCE AREAS

- A. East Texas Timberlands A-n North Section A-s South Section
- B. Coast MarshC. Coast Prairie
- D. Blackland Prairies D-n North Section D-s South Section
- E. East Cross Timbers
- F. Grand Prairie F-n North Section F-s South Section
- G. West Cross Timbers
- H. North Central Prairies
- I. Central Basin
- J. Rio Grande Plain
- K. Edwards Plateau
- L. Rolling Plains
- M. High Plains
- N. Trans-Pecos

Cooperative Extension Work in Agriculture and Home Economics, The Texas A&M College System and the United States Department of Agriculture cooperating. Distributed in furtherance of the Acts of Congress of May 8, 1914, as amended, and June 30, 1914. 25M-6-62, Revised

# WINTER TEMPORARY PASTURES

AREAS	OATS	BARLEY	WHEAT	RYE	RYEGRASS	LEGUME
A. East Texas Timberlands A-n North Section Plant September 1-15	Moregrain E: Alamo-X EC Arkwin ECS New Nortex ICS Mustang LSF	Cordova ICSM Rogers ICS Texan ICSM Harbine ICS	Knox ES Kaw IS Quanah I Crockett L	Gator E Elbon E Abruzzi L	Gulf IC Common LC	Lana (I) or Hairy (L) vetch, 10-15 lb./acre Crimson clover I, 10-15 lb./acre hulled seed Singletary pea (I), 40-50 lb./acre (Do not graze
A-s South Section Plant September 15-30	Moregrain ES Suregrain ES Alamo-X EC Arkwin ECS New Nortex ICS	Goliad E Arivat ECSM Cordova ICSM	Milam J Quanah L	Gator E Abruzzi L	Gulf IC Common LC	when setting seed.) Red Clover (L), 10-15 lb./acre Lana (I) or Hairy (L) vetch, 10-15 lb./acre Crimson Clover (I), 10-15 lb./acre hulled seed
	2-2½ bu. alone 1½ bu. with legum Camellia and Ala mo-X seed ½ bu more	1¼-1½ bu. alone 1 bu. with legume	1-1¼ bu. alone ¾ bu. with legume	1-1½ bu. alone ⅔ bu. with legume	25 lb. alone 20 lb. with legume	Singletary pea (I), 40-50 lb./acre (Do not graze when setting seed.) Red Clover (L), 10-15 lb./acre Burclover (L), (From Grimes Co. west only) 5-7 lb./acre
<ul> <li>B. Coast Marsh</li> <li>C. Coast Prairie</li> <li>Plant October 1-20</li> <li>Small grains or ryegrass alone may</li> <li>be planted 15 days earlier.</li> </ul>	SuregrainEMoregrainEAlamo-XECamelliaEAlberINew NortexI	Goliad E Arivat ECSM	Milam I Atlas 66 IS	Gator E Abruzzi L	GulfICPlant Gulf ryegrass September 1-15	Floranna or Hubam sweet- clover (L), 8-10 lb./acre Lana (I) or Hairy (L) vetch, 10-15 lb./acre
	2-2 <sup>1</sup> / <sub>2</sub> bu. alone 1 <sup>1</sup> / <sub>2</sub> bu. with legum Camellia and Ala mo-X seed <sup>1</sup> / <sub>2</sub> bu more	$1\frac{1}{2}$ -1 $\frac{3}{4}$ bu. alone e 1-1 $\frac{1}{4}$ bu. with legume	1-1¼ bu. alone ¾ bu. with legume	1-1½ bu. alone ¾ bu. with legume	25 lb. alone 20 lb. with legume	Crimson clover (1), 10-15 lb./acre hulled seed Red clover (L), 10-15 lb./acre (Sweetclovers and vetch not recommended east of Harris County.)
<ul> <li>D. Blackland Prairies</li> <li>E. East Cross Timbers</li> <li>F. Grand Prairie</li> <li>D. E. F-n North Sections</li> <li>Plant Sont 15, 20</li> </ul>	Moregrain E Alamo-X E0 New Nortex IC Mustang LSH Bronco LC	Cordova ICSM Rogers IS Harbine IS Texan ICSM	KnoxESImp. TriumphICSKawISCrockettLQuanahL	Gator E Elbon E Abruzzi L	Gulf IC Common LC	Hubam and Madrid sweetclover, (L), spring plant 8-10 lb./acre Common alfalfa, 5-7 lb./acre
D & F-s South Sections Plant October 1-15	Suregrain E Moregrain E Alamo-X E Victorgrain ISH New Nortex IC Mustang LSH 2-2 <sup>1</sup> / <sub>2</sub> bu. alone 1 <sup>1</sup> / <sub>2</sub> bu. with legum	5 Goliad E Cordova ICSM Rogers IS 1 1 <sup>1</sup> / <sub>4</sub> -1 <sup>1</sup> / <sub>2</sub> bu. alone <sup>3</sup> / <sub>4</sub> bu. with legume	Milam I Quanah I Crockett L 1-1 <sup>1</sup> /4 bu. alone <sup>3</sup> /4 bu. with legume	Gator E Elbon E $1-1\frac{1}{2}$ bu. alone $\frac{2}{3}-\frac{3}{4}$ bu. with	GulfICCommonLC25lb. alone20lb. with legume	Lana (I) or Hairy (L) vetch, 10-15 lb./acre Hubam and Madrid sweetclover, (L), fall plant 8-10 lb./acre Common alfalfa, 5-7 lb./acre
G. West Cross Timbers	Alamo-X seed ½ bu more Moregrain E	S Cordova ICSM	Imp. Triumph ICS	Gator E	(Plant Gulf rye- grass Sept. 1-15). Not recommended	Lana (I) or Hairy (L) vetch, 10-15 lb./acre Lana (I) or Hairy (L) vetch,

G. West Cross Timbers H. North Central Prairies	Moregrain Alamo-X New Nortex ICS	CordovaICSMRogersISHarbineIS	Imp. Triumph ICS Kaw IS Quanah I	Gator I Elbon I Abruzzi I		Lana (I) or Hairy (L) vetch, 10-15 lb./acre
Plant September 15-30	Mustang LSH Bronco LCS 1½-2 bu. alone 1 bu. with legume	1-1¼ bu. alone ¾ bu. with legume	Crockett L 1 bu. alone ¾ bu. with legume	1-1½ bu. alone %-¾ bu. with legume		Hubam and Madrid sweetclover (L), plant in spring 8-10 lb./acre (Sweetclovers on heavier soil.)
I. Central Basin K. Edwards Plateau Plant September 15-30	MoregrainESAlamo-XECVictorgrainISHNew NortexICSMustangLSH	Cordova ICSM Rogers IS	Imp. Triumph ICS Kaw IS Quanah I Crockett L	Gator 1 Elbon 1	E Not recommended	Hubam and Madrid sweetclover (L), spring plant 5-7 lb./acre Common alfalfa 3-5 lb./acre Lana (I) or Hairy (L) vetch, 10-15 lb./acre
	1½-2 bu. alone 1 bu. with legume	<sup>3</sup> ⁄ <sub>4</sub> -1 bu. alone <sup>3</sup> ⁄ <sub>4</sub> bu. with legume	¾ bu. alone¾ bu. with legume	1-1½ bu. alone		Legumes should go in better watered or bottomland areas only.
J. Rio Grande Plain Plant October 1-15	Suregrain ES Moregrain ES Alamo-X EC Camellia ECS Victorgrain ISH Alber ICS New Nortex ICS DRYLAND 1½-2 bu. alone 1 bu. with legume IRRIGATED 2½ bu. alone 2 bu. with legume Camellia and Ala- mo-X seed ½ bu. more	Goliad E Arivat ECSM DRYLAND 1 bu. alone 34 bu. with legume IRIGATED 1½-134 bu. alone 1-134 bu. with legume	Milam I DRYLAND ¾ bu. alone ¾ bu. with legume IRRIGATED 1-1¼ bu. alone 1 bu. with legume	Not recommended	Not recommended	Floranna or Hubam sweetclover, (L), 8-10 lb./acre drilled or 3-4 lb./acre in 38-40 inch rows Alfalfa, 2-3 lb./acre in 38-40 inch rows Varieties: Moapa, Indian, African, Hairy Peruvian and Texas, Southwestern or Barstow Common

L. Rolling Plains Plant September 1-15	New Nortex ICS Cimarron ICS Mustang LS Bronco LCS	CordovaECSMWintexECSMHarbineISRogersISKearneyICSM	Imp. TriumphICSKawLSTascosaLCSBisonLCSPoncaLS	Elbon Gator Abruzzi	I I L	recommended	Lana (I) or Hairy (L) vetch, 10-15 lb./acre
	2 bu. alone $1\frac{1}{4}$ - $1\frac{1}{2}$ bu. with legume	1 bu. alone ¾ bu. with legume	34 bu. alone 34 bu. with legume	$1-1\frac{1}{2}$ bu. alone $\frac{3}{3}-\frac{3}{4}$ bu. with legume			
M. High Plains Plant August 15-September 15	Cimarron ICS Mustang LS Wintok LCS Bronco LCS DRYLAND 1½ bu. alone IRRIGATED 2½ bu. alone 2 bu. with legume	Cordova* ECSM Harbine* ES Kearney ICSM Rogers IS Ward ICSM *less Winter Hardy DRYLAND ¾ bu. alone IRRIGATED 1½ bu. alone 1 bu. with legume	$\begin{array}{llllllllllllllllllllllllllllllllllll$	Elbon Gator 1-1½ bu. alone	I Not re	recommended	IRRIGATED ONLY Lana (I) or Hairy (L) vetch, 10-15 lb./acre or Madrid sweet- clover (L), 4-5 lb./acre, fall planted Common alfalfa, 2-3 lb./acre
N. Trans-Pecos (Irrigated only) High Altitudes Plant September 1-15 Low Altitudes Plant October 1-15	Moregrain ES New Nortex ICS Mustang LSH Bronco LCS 2 <sup>1</sup> / <sub>2</sub> -3 bu. alone 2 bu. with legume	Cordova ECSM Rogers IS 1¼-1½ bu. alone 1 bu. with legume	Kaw IS Tascosa LCS Crockett L DRYLAND ½-¾ bu. alone IRRIGATED 1-1½ bu. alone 1 bu. with legume	Elbon Gator 1-1½ bu. alone	I Not re	recommended	Common Alfalfa (L), 2-3 lb./acre, or Madrid sweetclover (L), in high altitudes and Hubam sweetclover (L), in low altitudes, fall seeded at 4-5 lb./acre

E - Early I - Intermediate L - Late C - Susceptible to leaf rust S - Susceptible to stem rust H - Susceptible to Helminthosporium blight

M - Susceptible to mildew