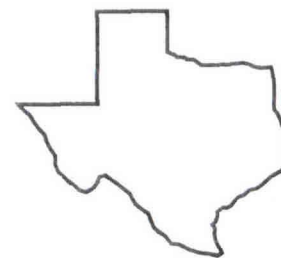
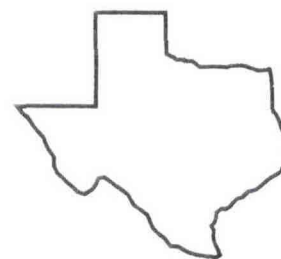
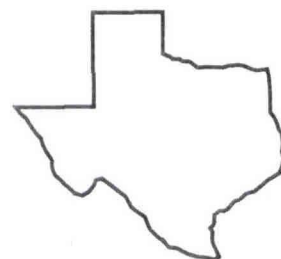
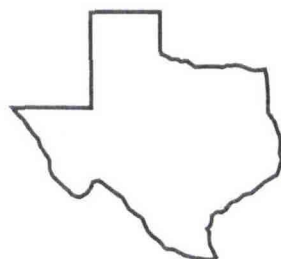
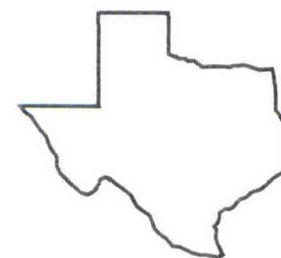


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# OVERTON FIELD DAY REPORT - 1994



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## OAT FORAGE YIELDS AT OVERTON FOR 1992-93 AND TWO-YEAR MEANS

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**Background.** Oats are an important winter forage crop in south central Texas. Oats can produce high yields of good quality forage. Oats are susceptible to winterkill and only the most winterhardy varieties should be planted in northeast Texas. There are significant differences between varieties for winterhardiness and forage distribution during a growing season. Some varieties produce much of their forage yield in the fall, while others produce a more balanced yield throughout the growing season.

**Research Findings.** An oat forage variety experiment is conducted annually at Overton. Many available commercial and experimental oat varieties were evaluated during the past 2 years. Fertilizer application rates and dates for 1992-93 are noted in Table 1. All tests were planted into a prepared seedbed. Planting dates were early September normally, however, in 1992 the planting date was September 14. Seeding rate was 110 lbs/ac and plot size was 4 x 12 ft. Seed was drilled into the seedbed approximately 1 inch deep. Entire plots were harvested on five dates with a Hege plot harvester at a cutting height of 2 inches. There were 4 replications. Oat forage was approximately 10 inches tall during the first harvest on November 23. The commercial varieties demonstrating best seedling vigor and rapid fall growth were Magnum II, FLA 501, and Bob. The experimentals NF 188, NF 170, TX89B1297, and TX89D7213 also produced high forage yields. The second harvest date was January 26, indicating warm weather and good winter production. Higher yields were produced by FLA 501, FLA 502, and Bob, followed closely by several other lines. The third harvest was on March 18, with best forage yields produced by FLA 302, closely followed by several experimentals. The fourth harvest was April 13, in which the better varieties were Buckshot HG 76-30 and Ozark. The last harvest was on May 18. The best yielding variety was Magnum II, and the better yielding experimentals were TX87B3086, and TX89D7213. The highest total season yield was produced by experimental NF 188, and NF 170, and the highest yielding variety was FLA 501. Differences in forage yields of less than the LSD (note under each column) may be due to experimental error and should not be considered significant. A two-year mean is presented for those varieties tested over this period. There were large differences between varieties. Experimental NF 170 and 188 produced highest 2 yr mean yields in excess of 7300 lbs/ac. Ozark and Bob produced two year mean yields of over 6600 lbs/ac. Differences in yield between varieties are often are a result of their winterhardiness, however, we have not had any winterkill on oats over the past two years.

**Application.** The data from these trials should be useful in selecting varieties for your farm. Depending on variety availability, compare forage yields to determine which variety you want to plant.

Table 1. Oat forage variety test, Overton, Texas 1992-93.

Variety	Harvest Dates					Total Yield	2 Year Mean
	11-23	1-26	3-18	4-13	5-18		
-----pounds of dry matter per acre-----							
NF 188*	1467	1805	1600	2020	1487	8379	7333
NF 170*	1392	1217	1435	2650	1624	8318	7635
TAM-0-386EB*	1082	1577	1993	1440	1452	7544	--**
FLA 501	1665	1956	1208	1299	1414	7542	--
TX89D7213*	452	1173	1650	1930	2161	7366	--
Buckshot HG 76-30	626	1242	1571	2368	1437	7242	--
TAM-0-386R*	1049	1404	1397	1599	1744	7193	--
FLa 502	594	1813	1643	1205	1868	7123	4678
TX83AB2923*	965	1135	1296	1841	1836	7073	6420
TX89D7198*	1235	1376	1316	1610	1517	7054	--
Bob	1404	1616	1308	1082	1515	6925	6696
TX89D7002*	682	1141	1589	1683	1701	6796	--
TX90D2457*	904	1149	1657	1510	1530	6750	--
TX89B1980*	1297	1565	947	1000	1634	6443	6226
TX88AB1491*	713	1700	1511	1160	1255	6339	--
Magnum II	2327	433	367	908	2161	6196	--
TX87B9453*	284	1188	1355	1248	1525	5598	--
TX89D7073*	44	257	1489	2114	1680	5582	--
Ozark	144	473	1148	1807	1734	5306	6983
TX87B3086*	110	1033	1076	639	2406	5264	--
Mean	922	1263	1378	1556	1684	6802	
LSD (0.10)	445	277	224	471	661	993	

Planted September 14, 1992.

Fertilization: Preplant 25 lb N, 100 lb P<sub>2</sub>O<sub>5</sub> and 100 lbs of K<sub>2</sub>O/ac. Topdressed with 48 lb N, 18 lb P<sub>2</sub>O<sub>5</sub> and 36 lbs of K<sub>2</sub>O on December 8, 1992. This test was topdressed again on March 9, 1993 with 61 lbs of N/ac.

Herbicide: Glean was applied postemergence at the two leaf stage at a rate of 0.3 oz/ac.

\*Experimental line, seed is presently not available.

\*\*Line not tested over last two years.