

Current Report

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Forage Production From Small Grain, 1982

L. M. Rommann, W. E. McMurphy and R. A. Johnston
Department of Agronomy

After several years of testing, a variety with a proven record of good or poor forage production may be dropped from the test so newer varieties can be included. This does not mean the dropped variety is no longer an acceptable forage producer. Data from previous Current Reports can be used to compare varieties for those years.

Forage production from small grain during the winter months is very important and essential for the livestock industry in Oklahoma. Cattle gains of $1\frac{1}{4}$ to $1\frac{1}{2}$ pounds per day are easily obtained during the fall, winter, and spring months on small grain pasture. However, good gains are produced during January and February only if forage is available. Very little new growth is produced at this time and one must

stockpile sufficient fall growth to carry the cattle through these winter months. The yields in this report simulate a system where small grains are used for pasture. Forage yields would probably be lower under grazing conditions.

Production is in oven dried pounds of forage per acre. Seasonal production for fall and winter grazing should be an important consideration in selecting varieties. Research has shown that eight pounds of small grain forage produced at these clipping frequencies have been adequate to produce one pound of beef.

Numbered varieties preceded by "OK" or "NF" are experimental varieties. Seed is not currently available.

Table 1. Precipitation for each location from August, 1981 through May, 1982

Month	Locations				
	Goodwell*	Haskell	Lahoma	Mangum	Perkins
<u>1981</u>					
August	4.00	3.96	1.42	2.96	5.06
September	0.96	1.69	3.95	0.52	1.93
October	1.19	8.73	4.21	3.53	3.89
November	0.87	2.24	2.59	1.87	4.04
December	0.23	0.39	0.20	0.21	0.19
<u>1982</u>					
January	0.07	3.96	0.72	1.22	2.45
February	0.22	0.97	1.90	0.34	1.74
March	0.85	1.27	2.28	1.96	1.37
April	2.03	1.78	2.60	0.51	2.36
May	2.42	8.87	9.27	7.66	14.59
Total	12.84	33.86	29.14	20.78	37.62

*Irrigated seven times, 15" total.

Table 2. PERKINS small grain variety test, forage production (lbs/acre) 1981-82 season. Teller loam.

Variety	Harvest Dates			1981-82 Total
	11-18	3-26	4-21	
<u>RYE</u>				
Bonel	1557	2111	372	4040
NF 74	1410	1833	466	3709
NF 214	1369	1923	359	3651
Maton	1283	1780	379	3442
NF 142	1285	1781	317	3383
<u>WHEAT</u>				
Arthur 71	1006	1360	615	2980
Sandy	1001	920	978	2899
Osage	887	971	1033	2892
TAM 101	807	1162	842	2811
OK 79257	1090	949	714	2753
OK 754615A	925	975	788	2689
Vona	840	790	1030	2660
TAM 105	730	826	1037	2593
OK 78047	1089	734	656	2480
Triumph 64	1008	717	747	2472
NF 2	1098	744	610	2452
OK 78002	1093	786	566	2445
Newton	881	655	812	2349
<u>TRITICALE</u>				
NF 185	1067	459	339	1866
LSD (lb/A)	272	330	150	447
CV (%)	18	21	16	11

Seeded: August 21, 1981

Soil Test: pH 5.8, P 75 lb/A, K 321 lb/A,
NO₃-N 2 lb/A

Fertilizer: 60-0-0 August 18, 1981
60-0-0 November 23, 1981
60-0-0 March 29, 1982

Table 3. LAHOMA small grain variety test, forage production (lbs/acre) 1981-82 season. Pond Creek silt loam.

Variety	Harvest Dates			1981-82 Total
	11-25	3-23	5-4	
<u>RYE</u>				
Bonel	2514	1689	1824	6027
NF 74	2492	1664	1775	5931
Maton	2327	1757	1544	5629
NF 214	2251	1709	1638	5597
NF 142	2278	1515	1627	5420
<u>WHEAT</u>				
Sandy	2028	1494	2801	6322
Osage	1724	1465	2694	5883
Vona	1583	1326	2504	5414
TAM 105	1491	1295	2598	5384
OK 754615A	2430	1202	1657	5289
Arthur 71	2336	1444	1481	5261
Newton	1738	1733	1734	5204
Triumph 64	2142	1343	1417	4902
OK 79257	1668	1563	1512	4743
OK 78047	2250	1141	1344	4735
TAM 101	1591	1455	1630	4676
OK 78002	1818	1215	999	4032
NF 2	2241	498	1080	3819
<u>TRITICALE</u>				
NF 185	2187	273	1502	3963
LSD (lb/A)	441	314	429	620
CV (%)	15	16	17	8

Seeded: September 10, 1981

Soil Test: pH 5.1, P 64 lb/A, K 508 lb/A,
NO₃-N 14 lb/A

Fertilizer: 60-43-0 September 9, 1981
71- 0-0 March 4, 1982
71- 0-0 March 23, 1982

Table 4. HASKELL small grain variety test, forage production (lbs/acre) 1981-82 season. Taloka soil.

Variety	Harvest Dates			1981-82 Total
	12-8	3-18	4-15	
<u>RYE</u>				
Bonel	3539	1825	1384	6748
NF 214	3077	2143	1307	6527
NF 142	3192	1920	1331	6442
NF 74	3198	1727	1407	6332
Maton	2925	1996	1155	6076
<u>WHEAT</u>				
Osage	1143	1755	3180	6079
Vona	1208	1084	3638	5930
Sandy	1313	1186	2954	5453
TAM 105	873	1396	3181	5451
Newton	1597	1270	2082	4949
OK 754615A	1072	1329	2518	4919
OK 79257	1661	1519	1708	4888
Arthur 71	1857	1098	1918	4873
Triumph 64	1429	938	2385	4753
OK 78047	1954	802	1626	4382
OK 78002	1826	1213	1296	4336
TAM 101	1350	1500	1480	4330
NF 2	2477	0	0	2477
<u>TRITICALE</u>				
NF 185	2649	0	0	2649
LSD (1b/Ac)	532	493	449	650
CV (%)	19	27	17	9

Seeded: September 8, 1982

Soil Test: pH 5.9, P 45 lb/A, K 175 lb/A, NO₃-N 15 lb/A.

Fertilizer: 100-60-60 September 4, 1981

60-0-0 December 16, 1981

60-0-0 March 18, 1982

Table 5. MANGUM small grain variety test, forage production (lbs/acre) 1981-82 season. Meno and Altus loamy fine sand.

Variety	Harvest Dates			1981-82 Total
	3-3	3-26	4-22	
<u>RYE</u>				
Maton	2088	2376	1058	5521
NF 214	1692	2063	904	4659
Bonel	1851	1918	889	4658
NF 142	1768	1976	849	4594
NF 74	1445	2137	988	4570
<u>WHEAT</u>				
Sandy	171	1735	1880	3786
NF 2	588	1715	1434	3737
Osage	200	1732	1708	3640
OK 78047	259	1758	1599	3616
TAM 105	196	1603	1806	3605
Triumph 64	194	1666	1598	3457
Arthur 71	245	1648	1398	3291
TAM 101	417	1687	1174	3278
OK 754615A	67	1439	1722	3228
OK 78002	220	1460	1335	3015
Newton	154	1411	1359	2924
Vona	35	1189	1645	2869
OK 79257	212	1415	1236	2863
<u>TRITICALE</u>				
NF 185	335	1591	1215	3141
LSD (1b/Ac)	400	554	368	920
CV (%)	44	23	19	18

Seeded: October 5, 1981

Soil Test: pH 6.2, P 150 lb/A, K 208 lb/A,
NO₃-N 2 lb/A.

Fertilizer: 40-40-40 October 5, 1981

40- 0- 0 March 4, 1982

Table 6. GOODWELL small grain variety test, forage production
(lbs/acre) 1981-82 season. Richfield clay loam.

Variety	Harvest Dates								1981-82 Total
	9-30	10-29	11-17	2-19	3-17	3-31	4-13	5-18	
<u>RYE</u>									
NF 74	554	519	649	1410	908	482	573	1728	6822
Maton	468	538	654	1358	844	434	492	1672	6462
NF 142	491	528	648	1413	912	462	423	1455	6333
NF 214	446	560	684	1122	880	452	399	1730	6273
Bonel	389	504	692	1253	1057	489	391	1484	6258
<u>WHEAT</u>									
Sandy	382	854	498	937	636	580	928	2278	7092
TAM 105	440	730	353	811	668	561	959	2200	6722
Triumph 64	400	961	401	876	606	643	816	1562	6266
Arthur 71	570	716	432	816	684	637	981	1417	6251
Vona	378	525	449	799	539	493	970	1990	6143
OK 78047	416	889	543	675	752	518	566	1590	5949
Osage	338	635	471	584	690	578	987	1642	5926
TAM 101	396	633	502	1074	998	580	444	1104	5730
OK 79257	396	651	628	934	820	442	458	901	5232
Newton	403	618	338	855	469	591	667	1233	5174
OK 754615A	344	520	501	672	674	544	710	1194	5159
OK 78002	339	782	598	1170	812	404	260	696	5061
NF 2	515	746	515	964	280	176	192	1417	4805
<u>TRITICALE</u>									
NF 185	614	844	636	1025	590	363	360	1384	5816
LSD (lb/Ac)	161	346	199	428	294	156	253	523	1135
CV (%)	26	36	26	31	28	22	29	24	13

Seeded: August 31, 1981

Fertilized with 60#N/A on Aug. 25, Sept. 30 and Mar. 23.