



Current Report

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FORAGE PRODUCTION FROM SMALL GRAIN, 1988

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Forage production from small grain during the winter months is very important and essential for the livestock industry in Oklahoma. Excellent cattle gains 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 adequate forage and/or supplement is available. Very little new wheat 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. Cuttings at each location continued until there was no longer any regrowth. Forage yields are presented 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.

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.

Conditions for forage production during fall of 1987 were unusually good. Early seeding was accomplished in most locations and excellent stands with good fall growth were obtained. Rains (Table 1) continued through the fall and as much as 2,500 pounds of forage were produced prior to December 1. In contrast, cold soils and snow cover for much of the second half of December all of January and early February resulted in no growth of wheat. This is an unusually long dormant period for Oklahoma. In most cases the first clipping in March was two to three weeks later than normal. Once wheat began regrowth in the spring, good soil moisture and few diseases resulted in very good forage yields.

Table 1. Precipitation for each small grain forage trial location from August, 1987 through May, 1988.

Month	Location				
	Goodwell*	Haskell	Lahoma	Manqum	Perkins
	----- inches -----				
<u>1987</u>					
August	3.01	6.93	3.12	0.44	2.12
September	3.55	2.64	4.02	3.23	6.15
October	0.10	1.61	0.00	3.40	0.90
November	0.54	5.88	0.96	0.33	1.56
December	0.37	7.18	2.99	2.55	3.43
<u>1988</u>					
January	0.33	1.09	0.90	0.48	0.94
February	0.02	1.04	0.06	0.00	0.50
March	0.78	4.72	2.78	4.01	5.56
April	2.53	1.26	5.54	4.24	5.10
May	2.49	0.65	2.13	0.46	2.79
Total	13.72	33.00	25.50	19.14	29.05

*Irrigated three times, 6-inches total.

This years test includes the following:

HARD RED WINTER PURE LINE VARIETIES

American Hybrid 135	Dodge
Agripro Mesa	Pioneer 2157
Agripro Mustang	Plainsman
Arkan	Siouxland
Century	Tam W-101
Chisholm	Triumph 64
Cody	

**HARD RED WINTER WHEAT PURE LINE
EXPERIMENTALS***

NF 126	OK 84287
OK 84286	OK 84343

HARD RED WINTER WHEAT HYBRID

BOUNTY 122

**SOFT RED WINTER WHEAT PURE LINE
VARIETIES**

Coker 833
Coker 916
McNair 1003

RYE VARIETIES RYE EXPERIMENTALS*

Bonnel	NF 109
	NF 125
	NF 133

*Seed is not currently available to producer.

PERKINS small grains variety test, forage production (lbs/acre) 1987-88 season. Teller loam.

Variety	Harvest Dates			Total
	12-11	4-07	5-23	
<u>WHEAT</u>				
Coker 833	1542	1815	419	3776
Coker 916	1356	1590	369	3315
Pioneer 2157	1397	1568	331	3296
Agripro Mesa	994	1630	366	2990
NF 126	1132	1328	431	2891
Arkan	928	1615	343	2886
Triumph 64	1006	1418	407	2831
OK 84343	1067	1326	389	2782
Agripro Mustang	1180	1225	319	2724
American Hybrid 135	1111	1231	365	2707
TAM W-101	768	1555	370	2693
Plainsman	850	1430	357	2637
Chisholm	960	1293	356	2609
Cody	790	1370	395	2555
Bounty 122	908	1259	331	2498
Siouxland	964	1104	415	2483
Century	748	1322	406	2476
Dodge	931	1146	360	2437
OK 84287	749	1152	375	2276
McNair 1003	1173	703	380	2256
OK 84286	691	1182	364	2237
<u>RYE</u>				
NF 125	1545	3356	423	5324
Bonel	1321	3499	449	5269
NF 109	1532	3304	431	5268
NF 133	1448	2721	422	4591
Average	1084	1646	383	3112
LSD (lbs/acre)	402	470	52	631
CV (%)	26	20	10	14

Planted: September 2, 1987
 Fertilizer: 60-0-0 August 24, 1987
 60-0-0 December 21, 1987
 60-0-0 April 8, 1988

HASKELL small grain variety test, forage production (lbs/acre) 1987-88 season. Taloka soil.

Variety	Harvest Dates				Total
	11-23	3-10	4-08	5-09	
<u>WHEAT</u>					
Coker 833	1540	720	1725	1469	5454
NF 126	1465	397	1949	1017	4828
Pioneer 2157	1418	526	1819	980	4743
Coker 916	1545	693	1531	884	4653
OK 84287	1270	381	1892	1017	4560
OK 84343	1509	454	1303	1194	4460
Century	1066	149	1777	1442	4434
OK 84286	1232	351	1818	963	4364
Arkan	1167	276	1693	984	4120
Plainsman	743	351	2032	993	4119
Cody	817	147	2206	932	4102
Chisholm	835	176	1985	990	3986
Dodge	1190	464	1165	1131	3950
American Hybrid 135	1272	304	1203	1166	3945
Triumph 64	982	155	1958	726	3821
Agripro Mesa	950	248	1423	1133	3754
Siouxland	890	176	1884	778	3728
Bounty 122	767	321	1508	1090	3686
TAM W-101	683	307	1580	1048	3618
McNair 1003	1186	422	810	1088	3506
Agripro Mustang	1071	212	1255	712	3250
<u>RYE</u>					
NF 125	2490	1727	2632	1290	8139
Bonel	2366	1543	2644	1213	7766
NF 109	2620	1421	2231	1362	7634
NF 133	2566	1530	2030	1098	7224
Average	1246	538	1762	1068	4714
LSD (lbs/acre)	251	134	273	135	486
CV (%)	13	18	11	9	7

Planted: September 9, 1987
 Fertilizer: 68-45-62 September 9, 1987
 60-0-0 March 11, 1988

GOODWELL small grain variety test, forage production (lbs/acre) 1987-1988 season. Richfield clay loam.

Variety	Harvest Dates						Total
	10-30	11-19	3-09	4-07	4-22	5-05	
<u>WHEAT</u>							
OK 84287	1043	1266	1015	1690	2244	301	7559
Agripro Mesa	1322	1351	1611	1398	1163	463	7308
Coker 916	1217	1409	969	1752	1586	368	7301
NF 126	1116	1206	1736	1287	1489	335	7169
McNair 1003	1253	1238	1461	1212	1636	359	7159
Pioneer 2157	1310	1120	1432	1550	1254	450	7116
TAM W-101	926	1027	1217	1626	1770	432	6998
Cody	802	987	1215	1684	1691	454	6833
Siouxland	1070	1171	972	1339	1798	386	6736
OK 84286	865	1078	1057	1580	1698	427	6705
Coker 833	1250	1093	1085	1200	1567	457	6652
OK 84343	1121	1469	927	1326	1364	419	6626
Dodge	1293	1177	1533	1244	987	368	6602
Plainsman	749	1280	1369	1438	1349	403	6588
Chisholm	1103	1092	1226	1505	1256	299	6481
Triumph 64	884	1374	867	1580	1317	362	6384
American Hybrid 135	1155	798	1038	1265	1672	383	6311
Bounty 122	901	1181	941	1535	1262	385	6205
Century	772	1237	983	1271	1536	400	6199
Agripro Mustang	873	1138	905	1071	1676	371	6034
Arkan	1093	1026	1156	760	1307	434	5776
<u>RYE</u>							
NF 133	900	1396	1404	1727	1269	437	7133
NF 125	1017	1100	1325	1322	1527	458	6749
Bone1	1150	1119	1134	1437	1482	303	6625
NF 109	923	965	1382	1228	1373	423	6294
Average	1044	1172	1198	1401	1491	395	6702
LSD (lbs/acre)	494	481	671	723	802	193	1614
CV (%)	34	29	40	37	38	35	17

Fertilizer: 46-0-0 September 10, 1987 Planted: September 30, 1987
 46-0-0 February 19, 1988
 46-0-0 March 23, 1988

LAHOMA small grains variety test, forage production (lbs/acre)
 1987-88 season. Pond Creek silt loam.

Variety	Harvest Dates					Total
	10-15	11-18	3-24	4-12	5-12	
<u>WHEAT</u>						
Pioneer 2157	1382	1275	1323	1543	1635	7158
Century	1187	956	844	2250	1861	7098
Coker 833	1358	1278	1032	1432	1509	6609
OK 84287	1138	1096	1044	1663	1663	6604
McNair 1003	1469	1395	1090	1090	1470	6514
Agripro Mesa	1224	1092	942	1468	1705	6431
Dodge	1336	848	1200	1368	1542	6294
NF 126	1445	680	1067	1780	1239	6211
OK 84286	1097	962	1054	1749	1347	6209
Siouxland	1273	914	1057	2088	854	6186
Coker 916	1311	1139	1118	1247	1352	6167
Arkan	1339	990	1208	1420	1167	6124
OK 84343	1113	768	1381	1316	1439	6017
Chisholm	887	792	1024	1800	1329	5832
American Hybrid 135	1393	1181	908	1293	967	5742
Triumph 64	1185	773	1040	1573	1135	5706
Agripro Mustang	1310	1039	1058	1216	1026	5649
Plainsman	862	636	1192	1730	1072	5492
Cody	1159	558	989	1690	1002	5398
Bounty 122	582	665	1016	1414	1140	4817
TAM W-101	539	370	1173	1262	1120	4464
<u>RYE</u>						
Bone1	1668	1374	2183	1050	1683	7958
NF 133	1486	1260	2518	652	1651	7567
NF 109	1681	1172	2447	696	1463	7459
NF 125	1528	1402	2355	679	1479	7443
Average	1238	985	1291	1419	1354	6286
LSD (lbs/acre)	273	262	246	358	410	822
CV (%)	16	19	14	18	21	9

Fertilizer: 18-46-0 August 20, 1987 Planted: September 4, 1987
 34-0-0 August 31, 1987
 34-0-0 February 15, 1988
 34-0-0 March 25, 1988

MANGUM small grains variety test, forage production (lbs/acre) 1987-88 season. Meno and Altus loamy fine sand.

Variety	Harvest Dates		Total
	3-15	4-13	
<u>WHEAT</u>			
Dodge	681	1048	1729
TAM W-101	453	939	1392
Agripro Mustang	640	747	1387
American Hybrid 135	319	853	1172
Agripro Mesa	555	603	1160
McNair 1003	422	611	1033
Arkan	374	640	1014
Century	104	886	990
OK 84286	368	608	976
NF 126	222	717	939
Coker 916	387	527	914
OK 84343	244	647	891
Pioneer 2157	315	553	868
OK 84287	311	534	845
Siouxland	197	581	778
Triumph 64	92	674	766
Plainsman	118	643	761
Bounty 122	161	529	690
Chisholm	58	490	548
Cody	113	419	532
Coker 833	73	72	145
<u>RYE</u>			
Bone1	2733	1161	3896
NF 109	2707	878	3585
NF 133	2583	969	3552
NF 125	1955	539	2494
Average	647	675	1322
LSD (lbs/acre)	284	401	517
CV (%)	32	42	28

Planted: September 17, 1987
 Fertilizer: 60-0-0 August 14, 1987
 40-0-0 March 15, 1988



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