



# Current Report

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## Forage Production from Small Grain 1971 - 72

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Forage production from small grain during the winter months is very important and essential for the livestock industry in Oklahoma. For many years, the income from grazing has been of greater value than the harvested grain because of favorable cattle prices. Cattle gains of 1-1/4 to 1-1/2 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 his cattle through these winter months. The yields in this report simulate a system where small grains are

used for pasture.

Precipitation for the growing season is given in Table 1. Total forage production from each of five locations and the average yield of each entry for four and five locations are given in Table 2. Seasonal and total production at each location for each variety are given in Tables 3 through 7. This 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.

Table 1. Precipitation for each location from August, 1971 through May, 1972.

Month	Location				
	Goodwell <sup>1</sup>	Lahoma <sup>2</sup>	Mangum	Muskogee	Perkins
<u>1971</u>					
August	0.55	1.60	2.28	2.28	1.90
September	1.09	4.30	4.76	10.45	7.68
October	1.30	4.70	5.13	6.83	2.61
November	2.78	0.70	0.56	2.41	0.87
December	0.54	1.60	1.84	4.98	2.81
<u>1972</u>					
January	0.07	0.20	0.04	0.36	0.17
February	0.04	0.30	0.05	0.70	0.32
March	0.10	0.10	0.00	0.95	1.72
April	0.48	2.45	0.58	5.13	2.42
May	5.00	2.40	4.09	1.03	2.38
Total	11.95 <sup>1</sup>	18.35	19.33	35.12	22.88

1. Irrigated eight times with 2.75 inches per application.
2. Courtesy of Mr. Clarence Ramming.

Table 3. Small grains variety test, forage production in lbs/acre, 1971-72 season. Richfield clay loam, Goodwell.

Variety	Harvest Dates								1971-72 Total	
	10-14	10-28	12-17	3-7	3-21	4-12	5-3	5-26		6-27
<b>RYE</b>										
Bonel	629	650	286	1497	565	1147	636	808	--	6218
Acco Synthetic	753	683	360	820	643	1115	574	837	--	5785
Elbon	553	601	304	1356	542	922	456	649	--	5383
<b>BARLEY</b>										
Kerr	869	721	308	725	719	3251	2345	846	--	9784
Will	301	477	267	1158	644	2620	951	865	--	7283
Barsoy	650	623	312	1324	665	2117	307	391	--	6389
<b>WHEAT</b>										
Triumph 64	508	575	352	811	1102	2562	364	--	--	6274
Scout 66	683	632	273	997	1078	2072	410	--	--	6145
Nicoma	580	574	240	1155	1071	2030	375	--	--	6025
D-145 B4	520	486	301	567	1451	2146	350	--	--	5821
Centurk	454	424	287	745	1481	1786	559	--	--	5736
Yukon	486	561	249	1100	1057	1506	559	--	--	5518
Tamwheat 101	428	447	218	1078	898	1055	382	--	--	4506
Agent	781	527	302	--	287	1628	247	--	--	3772
<b>TRITICALE</b>										
Fasgro T204	721	458	211	--	--	--	--	--	--	1390
<b>MISCELLANEOUS</b>										
Linn Perennial Ryegrass	149	275	143	499	531	2222	2504	2442	917	9682
Mix: Elbon, Agent & Ryegrass	501	602	422	674	478	932	1454	2018	826	7907
LSD (Lbs./A.)	194	214	154	544	430	793	354	325	--	1029
CV (%)	27	25	37	39	37	31	32	20		12

Seeding date: August 23, 1971  
 Soil test: pH 7.2, P 65 lb/A, K 675 lb/A  
 Fertilizer: 80-0-0 August 23, 1971  
 56-0-0 Oct. 15, Oct. 28, Mar. 6, Mar. 22,  
 Apr. 13, May 4, and June 6  
 Total was 472 lb. N/A.

Table 2. Summary of total production (lbs./A) of small grain forage from five locations, 1971-72 season.

Variety	Location					Average	
	Goodwell	Lahoma	Mangum	Muskogee	Perkins	5 Loc.	4 Loc.
<b>RYE</b>							
Grazemaster		4433	5606	2889	6494		4856
Bonel	6218	4127	5425	3129	6635	5107	4829
Acco Synthetic	5785	3743	5203	3043	5547	4664	4384
Elbon	5383	3572	4825	3409	5364	4511	4293
McNair Vitagraze		3752	4006	2363	5681		3951
Wintergrazer 70			4941	2693	5901		
OK 70991			4663		5650		
<b>WHEAT</b>							
Centurk	5736	4368	3071	3390	6154	4544	4246
Scout 66	6145	3547	3782	3041	6526	4608	4224
Nicoma	6025	3812	3859	2665	5626	4397	3991
Sturdy		3961	3441	2559	5995		3989
Yukon	5518	3704	3535	2714	5739	4242	3923
Agent	3772	3309	3679	2554	6124	3888	3917
D-145 B4	5821	3858	2457	3286	5894	4263	3874
Triumph 64	6274	3799	2843	2890	5674	4296	3802
Danne		3911	3004	2398	5698		3753
Tamwheat 101	4506	3476	2620	2537	5800	3788	3608
<b>BARLEY</b>							
Kerr	9784	4284	4425	2392	5505	5278	4152
Will	7283	3599	4704	2174	4547	4461	3756
Barsoy	6389	3675	3614	2160	4246	4017	3424
<b>OATS</b>							
Cimarron		3499	3329	1456	4333		3154
Chilocco		3292	3271	1307	3569		2860
Checota		3192	3684	1156	3206		2810
Nora			2367	1523			
<b>TRITICALE</b>							
Nebraska		3567	4356	2749	6403		4269
FasGro T204	1390	2379	3488	1895	2525	2335	2572
Rosner		2355	3319	1519	2789		2496
Graze Grain 70A		2178	2863	926	2023		1998
<b>MISCELLANEOUS</b>							
Mixture of Elbon, Agent & Ryegrass	7909	2798	4180	4216	6101	5041	4324
Wintergrazer 9290		3731	2950	3044	6261		3997
Linn Perennial Ryegrass	9682	2647	259	4281	5910	4556	3274
LSD	1029	398	1148	467	719		

Table 5. Small grain forage production (lbs/acre) variety test, 1971-72 season. Meno and Altus Loamy fine sand, Mangum

Variety	1971-72					Total
	11-16	2-16	3-15	4-17	5-31	
<b>RYE</b>						
Grazemaster	2193	721	1263	603	826	5606
Bonel	1599	621	1367	664	1174	5425
Acco Synthetic	1548	515	1350	688	1102	5203
Wintergrazer 70	1376	499	1793	692	581	4941
Elbon	1935	829	1085	359	617	4825
OK 70991	1387	412	1223	795	846	4663
McNair Vitagraze	1309	379	1156	583	579	4006
Triple graze	957	684	1114	599	574	3928
<b>WHEAT</b>						
Nicoma	750	116	1100	1748	145	3859
Scout 66	158	--	1471	1837	316	3782
Agent	548	410	1545	924	252	3679
Yukon	572	22	935	1830	176	3535
Sturdy	951	158	704	1358	270	3441
Centurk	319	29	897	1543	283	3071
Danne	249	--	940	1443	372	3004
Triumph 64	628	45	530	1488	152	2843
Tamwheat 101	142	38	1033	1247	160	2620
D-145 B4	114	--	526	1528	289	2457
<b>BARLEY</b>						
Will	1125	27	922	2196	434	4704
Kerr	1862	152	278	1300	833	4425
Barsoy	1935	127	619	826	107	3614
<b>OATS</b>						
Checota	221	165	416	1646	1236	3684
Cimarron	329	243	546	1501	710	3329
Chilocco	280	196	481	1539	775	3271
Nora	461	107	405	1267	127	2367
<b>TRITICALE</b>						
Nebraska	532	--	1178	1559	1087	4356
FasGro T204	1450	236	543	662	597	3488
Rosner	922	348	530	744	775	3319
Graze Grain 70A	1205	539	281	468	370	2863
<b>MISCELLANEOUS</b>						
Mixture of Elbon, Agent & Ryegrass	1256	452	1472	652	348	4180
Wintergrazer 9290	494	29	621	1004	802	2950
Linn Perennial Ryegrass	67	--	--	--	192	259
LSD (lbs./A.)	799	305	503	453	237	1148
CV (%)	63	57	39	28	32	22

Seeding date: September 10, 1971  
 Soil test: pH 5.8, P 229 lb/A, K 369 lb/A  
 Fertilizer: 60-0-0 September 10, 1971  
 60-0-0 November 17, 1971  
 60-0-0 February 18, 1972  
 60-0-0 March 16, 1972  
 60-0-0 April 18, 1972

Table 4. Small grains variety test, forage production in lb/acre, 1971-72 season. Grant Silt Loam, Lahoma.

Variety	Harvest Dates				1971-72 Total
	11-29	3-13	4-19	5-30	
<b>RYE</b>					
Grazemaster	1655	1145	724	909	4433
Bonel	1771	1045	543	768	4127
McNair Vitagraze	1742	1000	387	623	3752
Acco Synthetic	1771	917	436	619	3743
Elbon	1278	1149	459	686	3572
<b>WHEAT</b>					
Centurk	1670	1006	748	944	4368
Sturdy	1684	917	603	757	3961
Danne	1467	935	750	759	3911
D-145 B4	1496	884	739	739	3858
Nicoma	1445	1013	802	552	3812
Triumph 64	1459	915	715	710	3799
Yukon	1249	1045	835	575	3704
Scout 66	1365	1009	454	719	3547
Tamwheat 101	1111	1011	648	706	3476
Agent	1525	786	394	604	3309
<b>BARLEY</b>					
Kerr	1888	877	512	1007	4284
Barsoy	1888	690	485	612	3675
Will	1241	757	717	884	3599
<b>OATS</b>					
Cimarron	1517	686	563	733	3499
Chilocco	1321	741	332	898	3292
Checota	1016	721	428	1027	3192
<b>TRITICALE</b>					
Nebraska	1089	1035	715	728	3567
FasGro T204	1844	--	--	535	2379
Rosner	1663	--	--	692	2355
Graze Grain 70A	1503	--	--	675	2178
<b>MISCELLANEOUS</b>					
Wintergrazer 9290	1183	764	862	922	3731
Mixture of Elbon, Agent & Ryegrass	1401	532	163	702	2798
Linn Perennial Ryegrass	1271	423	--	953	2647
LSD (lbs./A.)	273	210	175	176	398
CV (%)	13	17	21	17	8

Seeding date: September 2, 1971  
 Soil test: pH 5.8, P 46 lb/A, K 590 lb/A  
 Fertilizer: 60-40-0 September 1, 1971  
 60-0-0 December 1, 1971  
 60-0-0 March 15, 1972  
 60-0-0 April 20, 1972

**Table 7. Small grains variety test, forage production in lbs/acre, 1971-72 season. Vanoss Fine Sandy Loam; Perkins.**

Variety	Harvest Dates				1971-72 Total
	11-4	3-15	4-13	5-16	
<b>RYE</b>					
Bonel	2475	2193	1176	791	6635
Grazemaster	2471	1946	1278	799	6494
Wintergrazer 70	2031	2062	1300	508	5901
McNair Vitagraze	2639	1634	980	428	5681
OK 70991	2347	1713	1169	421	5650
Acco Synthetic	2447	1488	1191	421	5547
Elbon	2301	1728	1016	319	5364
<b>WHEAT</b>					
Scout 66	2047	1568	1873	1038	6526
Centurk	1842	1401	1873	1038	6154
Agent	2756	653	1481	1234	6124
Sturdy	2555	1074	1742	624	5995
D-145 B4	2024	1053	2171	646	5894
Tamwheat 101	1705	1358	1808	929	5800
Yukon	1622	1307	2033	777	5739
Danne	1472	1307	2033	886	5698
Triumph 64	1753	1336	2040	545	5674
Nicoma	1756	1176	2062	632	5626
<b>BARLEY</b>					
Kerr	2262	414	1278	1561	5505
Barsoy	2372	276	908	690	4246
Will	2383	290	1104	770	4547
<b>OATS</b>					
Cimarron	1770	203	748	1612	4333
Chilocco	2059	44	283	1183	3569
Checota	1834	29	334	1009	3206
<b>TRITICALE</b>					
Nebraska	2069	1140	2040	1154	6403
Rosner	1947	--	80	762	2789
Fasgro T204	2234	--	102	189	2525
Graze Grain 70A	1725	--	160	138	2023
<b>MISCELLANEOUS</b>					
Wintergrazer 9290	1781	1002	1946	1532	6261
Mixture of Elbon, Agent & Ryegrass	2364	1292	942	1503	6101
Linn Perennial Ryegrass	1517	951	972	2470	5910
Selection 13					
Agroticum 1011	1011	1249	1653	1628	5541
LSD (lbs./A.)	442	264	272	343	719
CV (%)	15	16	15	28	10

Seeding date: August 26, 1971  
 Soil test: pH 5.4, P 119 lb/A, K 295 lb/A  
 Fertilizer: 60-0-0 August 24, 1971  
 60-0-0 November 8, 1971  
 60-0-0 March 16, 1972  
 60-0-0 April 14, 1972

**Table 6. Small grains variety test forage production in lbs/acre, 1971-72 season. Taloka soil, Muskogee.**

Variety	Harvest Dates				1971-72 Total
	11-16	3-15	4-13	5-15	
<b>RYE</b>					
Elbon	2033	661	563	152	3409
Penngrazer-W	1510	777	643	272	3202
Bonel	1663	566	575	325	3129
Acco Synthetic	1648	566	653	176	3043
Grazemaster	1154	632	840	263	2889
Wintergrazer 70	1147	595	675	276	2693
McNair Vitagraze	1329	515	399	114	2363
<b>WHEAT</b>					
Centurk	1546	603	918	323	3390
D-145 B4	1641	378	1089	178	3286
Scout 66	1583	436	831	191	3041
Triumph 64	1169	465	1044	212	2890
Yukon	1278	399	799	238	2714
Nicoma	1227	508	828	102	2665
Sturdy	1147	443	880	89	2559
Agent	1205	571	528	240	2544
Tamwheat 101	1169	436	682	250	2537
Danne	966	269	1025	138	2398
<b>BARLEY</b>					
Kerr	1031	261	802	298	2392
Will	1271	94	646	163	2174
Barsoy	1169	385	606	---	2160
<b>Oats</b>					
Nora	1423	--	--	100	1523
Cimarron	1329	--	--	127	1456
Chilocco	1307	--	--	--	1307
Checota	1118	--	--	38	1156
<b>TRITICALE</b>					
Nebraska	1191	436	799	323	2749
FasGro T204	1844	--	--	51	1895
Rosner	1423	--	--	100	1519
Graze Grain 70A	871	--	--	51	926
<b>MISCELLANEOUS</b>					
Wintergreen					
Annual Ryegrass	2258	348	577	2274	5457
Linn Perennial ryegrass	1096	203	632	2350	4281
Mixture of Elbon, Agent & L.P. ryegrass	1401	472	748	1595	4216
Wintergrazer 9290	1300	312	1007	425	3044
LSD (lbs./A.)	319	153	231	167	467
CV (%)	17	24	21	31	13

Seeding date: September 2, 1971  
 Soil test: pH 6.0, P 33 lb/A, K 100 lb/A  
 Fertilizer: 60-80-80 September 1, 1971  
 60-0-0 November 17, 1971  
 60-0-0 March 15, 1972  
 60-0-0 April 14, 1972