



# Sil-All Density Chart

1. Core the silage
  2. Record the fresh weight
  3. Estimate the
  4. Multiply 'As Fed' density by DM/100 to gain the DM density
- eg. A corn bunker with a 7 inch bore weighing 225g at approx 31% DM – the 'As Fed' density of 221Kg/M<sup>3</sup> Dry Density, which is within the t

## Recommended silage densities

Bunker/Clamp/Pit	Density Kg/M <sup>3</sup>	
	as fed	DM
Grass / Alfalfa silage	560 - 689	224 - 240
Corn Silage	640 - 801	224 - 240

Adapted from Holmes and Muck, 1999

## Summary of core samples

	Grass
	Aver
% DM	4
Wet density (Kg/M <sup>3</sup> )	59
Dry density (Kg/M <sup>3</sup> )	23

Adapted from Holmes and Muck

Fresh Wt (g)	100	125	150	175	200	225	250	275	
Hole Depth (Inch & CM)									
4.0 10.1	555	693	832	972	1111	1249	1388	1528	
4.5 11.4	493	617	740	863	986	1111	1235	1358	
5.0 12.7	443	556	666	777	889	993	1111	1235	
5.5 13.9	404	504	605	706	807	908	1009	1112	
6.0 15.2	370	463	556	649	740	833	926	1018	
6.5 16.5	341	428	513	597	684	769	854	940	
7.0 17.7	317	397	476	556	634	714	793	873	
7.5 19.0	296	370	443	519	593	666	740	815	
8.0 20.3	277	348	416	485	556	625	694	764	
8.5 21.5	261	322	392	458	522	585	653	719	
9.0 22.8	247	309	370	432	493	556	617	679	
9.5 24.1	234	293	351	410	468	527	585	644	
10.0 25.4	223	277	333	389	443	500	556	610	
10.5 26.6	211	264	317	370	423	474	529	581	
11.0 27.9	202	253	303	354	404	455	505	556	
11.5 29.2	194	242	290	338	386	434	484	532	
12.0 30.4	186	232	277	324	370	416	463	509	

Increasing red colour represents the increasing risk of aerobic instability = heating.

dry matter.  
of the sample.  
density is 714 Kg/M<sup>3</sup>, with the equivalent DM  
target range

**from 168 bunker silos**

Alfalfa silage (n=87)		Corn Silage (n=81)	
Range	Range	Average	Range
2	24 - 67	34	25 - 46
32	208 - 977	689	368 - 961
37	105 - 434	233	125 - 378

ck, 1999

300	325	350	375	400
1212	1313			
1112	1203	1296		
1025	1112	1196		
951	1032	1112		
889	963	1036		
833	903	972		
785	849	914	980	
738	802	863	926	987
702	761	819	878	935
666	722	777	833	889
634	687	740	793	846
606	657	706	758	807
580	628	676	724	774
556	602	649	695	740