

< Acres of ALL HAYLAND

Table for Hayland reporting, including sections for 1st, 2nd, 3rd, and 4th crops. Each section contains fields for HAYLAGE (ft in a, by, =, T.), Sm. Bales, Lg. Bales, Ag. Bags, BUNKER (L x, W x, H =, Tons), Green >> Acres, and Chop >>> @T/Ac.

TOTAL TONS HAY DHE 15% MOISTURE >

< Acres of PASTURE 1st _____ T. 2nd _____ T. 3rd _____ T.

HAY YIELD PER ACRE >

< Acres of OTHER FORAGE

Table for Other Forage with fields for HAYLAGE, Bales, Ag. Bags, and OTHER FORAGE TOTAL: TONS DHE > YIELD PER ACRE >

< Acres of CORN SILAGE

< Total Acres of Corn Planted for Grain & Silage

Table for Corn Silage and Total Acres of Corn Planted, including fields for HAYLAGE, BUNKER, Bags feet @ diameter, Tons In Ag. Bags, and TOTAL TONS CORN SILAGE @85% >

< Acres of CORN HARVESTED FOR GRAIN

Table for Corn Harvested for Grain with fields for High Moisture, Dry Shell CORN, Cob CORN Crib Dimensions, and TOTAL CORN GRAIN (*at 15% moisture) BUSHELS >

Summary table for OATS, RYE, BARLEY, WHEAT, and SOYBEANS, including Acres, Yield per Acre, and Total Dry Bushels.

< SubTOTAL ACRES OF ALL FEED CROPS

CASH CROPS

Table for Cash Crops with columns: Cash Crop Acres, Crop Name, Yield, Units, Yield per Acre, \$Amt. Received, \$Dollars per Acre.

< SubTOTAL ALL CASH CROP ACRES

GRAND TOTAL ALL TILLABLE AC _____ ACRES OWNED _____ ACRES RENTED _____

Corn Silage

Length x Width x Height x 42#/cu. ft.*
divided by 2000 = tons of 65% corn silage

*This value can vary for 22# to 67#/cu.ft. depending on compaction.

Haylage

Length x Width x Height x 17#/cu.ft. **
divided by 2000 = tons of dry hay equivalent
**Caution this value can vary from 9# to 32#/cu.ft.
depending on compaction.

Silo Bag Calculations

For 8 Foot Diameter Bag

- Haylage .38 tons Dry Hay
- Hay Equivalent
- Ground ear corn .95 tons per ft. of 65% cornsilage
- Ground shell corn 21.5 bu./ft.
- 21.5 bu./ft.
- 34 bu./ft.

For 9 foot Diameter Bag

- Haylage .44 tons per ft. Dry
- Hay Equivalent
- Ground ear corn 1.1 tons per foot
- Ground shell corn 26.5 bu./ft.
- 26.5 bu./ft.
- 42 bu./ft.

For 10 Foot Diameter Bag

- Haylage .54 tons per ft. Dry
- Hay Equivalent
- Ground ear corn 1.35 tons per ft.
- Ground shell corn 32.6 bu./ft.
- 32.6 bu./ft.
- 51.7 bu./ft.

For 12 Foot Diameter Bag

- Haylage 0.85 ton/ft.
- Hay Equivalent
- Ground ear corn 2.1 ton/ft.
- Ground shell corn 46.9 bu./ft.
- 46.9 bu./ft.
- 74.45bu./ft.

According to a 1997 bunker silo density study done by UW Extension located on BTM.

APPROXIMATE TONS OF DRY MATTER CAPACITY

1ST COLUMN EQUALS DEPTH OF SETTLED SILAGE in feet	TOP ROW IS THE INSIDE DIAMETER OF SILO (in feet)											
	10	12	14	16	18	20	22	24	25	26	28	30
2	0	0	1	1	1	1	1	2	2	2	2	3
4	1	1	2	2	3	3	4	5	5	6	6	7
6	2	2	3	4	5	6	7	9	10	10	11	13
8	3	3	4	6	7	9	11	13	15	16	17	20
10	4	4	6	8	10	12	15	18	19	21	24	28
12	5	5	8	10	13	16	19	23	25	27	31	36
14	6	6	10	13	16	20	24	29	31	34	39	45
16	7	7	11	15	19	24	29	35	38	41	47	54
18	8	8	12	16	20	26	32	38	41	44	50	58
20	9	9	14	18	23	28	34	41	44	48	54	64
22	11	11	15	20	25	31	38	45	48	52	58	70
24	12	12	17	22	27	33	40	48	51	55	62	74
26	13	13	18	24	30	36	43	51	54	58	66	78
28	14	14	19	25	31	38	45	53	56	60	68	81
30	15	15	20	26	32	39	46	54	57	61	70	84
32	16	16	21	27	33	40	48	56	59	63	72	87
34	17	17	22	28	34	41	49	57	60	64	74	89
36	18	18	23	29	35	42	50	58	61	65	75	90
38	19	19	24	30	36	43	51	59	62	66	76	92
40	20	20	25	31	37	44	52	60	63	67	77	94
42	21	21	26	32	38	45	53	61	64	68	78	96
44	22	22	27	33	39	46	54	62	65	69	79	98
46	23	23	28	34	40	47	55	63	66	70	80	100
48	24	24	29	35	41	48	56	64	67	71	81	102
50	25	25	30	36	42	49	57	65	68	72	82	104
52	26	26	31	37	43	50	58	66	69	73	83	106
54	27	27	32	38	44	51	59	67	70	74	84	108
56	28	28	33	39	45	52	60	68	71	75	85	110
58	29	29	34	40	46	53	61	69	72	76	86	112
60	30	30	35	41	47	54	62	70	73	77	87	114
62	31	31	36	42	48	55	63	71	74	78	88	116
64	32	32	37	43	49	56	64	72	75	79	89	118
66	33	33	38	44	50	57	65	73	76	80	90	120
68	34	34	39	45	51	58	66	74	77	81	91	122
70	35	35	40	46	52	59	67	75	78	82	92	124
72	36	36	41	47	53	60	68	76	79	83	93	126
74	37	37	42	48	54	61	69	77	80	84	94	128
76	38	38	43	49	55	62	70	78	81	85	95	130
78	39	39	44	50	56	63	71	79	82	86	96	132
80	40	40	45	51	57	64	72	80	83	87	97	134
82	41	41	46	52	58	65	73	81	84	88	98	136
84	42	42	47	53	59	66	74	82	85	89	99	138
86	43	43	48	54	60	67	75	83	86	90	100	140
88	44	44	49	55	61	68	76	84	87	91	101	142
90	45	45	50	56	62	69	77	85	88	92	102	144
92	46	46	51	57	63	70	78	86	89	93	103	146
94	47	47	52	58	64	71	79	87	90	94	104	148
96	48	48	53	59	65	72	80	88	91	95	105	150
98	49	49	54	60	66	73	81	89	92	96	106	152
100	50	50	55	61	67	74	82	90	93	97	107	154

APPROXIMATE TONS OF CORN SILAGE CAPACITY (at 65% Moisture)

1ST COLUMN EQUALS DEPTH OF SETTLED SILAGE in feet	TOP ROW IS THE INSIDE DIAMETER OF SILO (in feet)											
	10	12	14	16	18	20	22	24	25	26	28	30
2	0	0	3	3	3	3	3	6	6	6	6	9
4	3	3	6	6	6	6	6	14	14	14	14	20
6	6	6	9	9	9	9	9	26	26	26	26	37
8	9	9	11	11	11	11	11	40	40	40	40	57
10	11	11	13	13	13	13	13	54	54	54	54	80
12	13	13	16	16	16	16	16	66	66	66	66	103
14	16	16	19	19	19	19	19	83	83	83	83	129
16	19	19	23	23	23	23	23	100	100	100	100	154
18	23	23	28	28	28	28	28	117	117	117	117	183
20	26	26	31	31	31	31	31	137	137	137	137	211
22	31	31	37	37	37	37	37	157	157	157	157	243
24	34	34	40	40	40	40	40	177	177	177	177	277
26	37	37	44	44	44	44	44	199	199	199	199	309
28	40	40	48	48	48	48	48	220	220	220	220	343
30	43	43	51	51	51	51	51	243	243	243	243	380
32	46	46	54	54	54	54	54	266	266	266	266	417
34	49	49	58	58	58	58	58	291	291	291	291	454
36	51	51	60	60	60	60	60	314	314	314	314	491
38	54	54	63	63	63	63	63	339	339	339	339	531
40	57	57	66	66	66	66	66	366	366	366	366	571
42	60	60	70	70	70	70	70	394	394	394	394	616
44	63	63	74	74	74	74	74	426	426	426	426	657
46	66	66	77	77	77	77	77	460	460	460	460	700
48	69	69	81	81	81	81	81	496	496	496	496	743
50	72	72	85	85	85	85	85	534	534	534	534	789
52	75	75	89	89	89	89	89	574	574	574	574	826
54	78	78	93	93	93	93	93	616	616	616	616	863
56	81	81	98	98	98	98	98	660	660	660	660	903
58	84	84	103	103	103	103	103	706	706	706	706	940
60	87	87	109	109	109	109	109	754	754	754	754	977
62	90	90	114	114	114	114	114	804	804	804	804	1014
64	93	93	120	120	120	120	120	856	856	856	856	1054
66	96	96	126	126	126	126	126	910	910	910	910	1091
68	99	99	133	133	133	133	133	966	966	966	966	1126
70	102	102	140	140	140	140	140	1024	1024	1024	1024	1166
72	105	105	147	147	147	147	147	1084	1084	1084	1084	1206
74	108	108	154	154	154	154	154	1146	1146	1146	1146	1243
76	111	111	161	161	161	161	161	1210	1210	1210	1210	1280
78	114	114	169	169	169	169	169	1276	1276	1276	1276	1317
80	117	117	177	177	177	177	177	1344	1344	1344	1344	1357
82	120	120	185	185	185	185	185	1414	1414	1414	1414	1394
84	123	123	194	194	194	194	194	1486	1486	1486	1486	1431
86	126	126	203	203	203	203	203	1560	1560	1560	1560	1469
88	129	129	212	212	212	212	212	1636	1636	1636	1636	1509
90	132	132	221	221	221	221	221	1714	1714	1714	1714	1546
92	135	135	230	230	230	230	230	1794	1794	1794	1794	1583
94	138	138	239	239	239	239	239	1876	1876	1876	1876	1620
96	141	141	248	248	248	248	248	1960	1960	1960	1960	1660
98	144	144	257	257	257	257	257	2046	2046	2046	2046	1697
100	147	147	266	266	266	266	266	2134	2134	2134	2134	1734

To find the tons remaining in a top unloading silo after removing silage:
(1) find the tons of settled silage when the silo was filled. (2) find the tons in a silo filled to a height equal to the number of feet removed.
(3) subtract the tons in Step (2) from the tons in Step (1).

Example: A 20 foot silo filled to a settled depth of 60 feet with 22 feet removed. (1) 20 x 60 equals 1200 tons (2) 20 x 22 equals 440 tons (3) 1200 tons minus 440 tons equals 760 tons of silage remaining.

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