



Extension Extra

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Days Remaining to First Killing Frost

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Crop producers and extension field staff need to be able to evaluate how much of the growing season remains before a killing frost. The table on the next page lists DAYS TO FREEZE or how many days are remaining, from a specified date, at a given location, to the first killing frost within South Dakota.

The first killing frost is when there is a 50% probability of 28 degree F. temperatures. The 28 degree as compared to the 32 degree F. threshold value was chosen since it is the lowest temperature for which cold weather crop statistics are maintained and of which most crops are still tolerant as they mature.

When using this information, remember there is a chance that, for a given location, the first killing frost may arrive earlier or later. The DAYS TO FREEZE listed in the table by location and date are the best estimate of how many days, on the average, are remaining in the growing season.

The DAYS TO FREEZE were calculated from information in the South Dakota Agriculture Statistics Service (Crop. and Livestock Reporting Service) publication *South Dakota Field Crops: From Planting to Harvest*.

This information was published in 1980 and summarizes data from 1970 through 1979. Not all weather stations are included; however, at least one location in every county is listed. For convenience the dates in the table are listed in 10-day increments for additional calculation if needed.

This publication and others can be accessed electronically from the SDSU College of Agriculture & Biological Sciences publications page, which is at <http://agbiopubs.sdstate.edu/articles/ExEx8060.pdf>



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DAYS TO FIRST FALL FREEZE (50% PROBABILITY OF 28 F) AT SEVERAL DATES AND LOCATIONS IN SOUTH DAKOTA

LOCATION-COUNTY	DATE										
	MAY 20	MAY 30	JUN 9	JUN 19	JUN 29	JUL 9	JUL 19	JUL 29	AUG 8	AUG 18	AUG 28
	DAYS TO FREEZE										
01 WHITE LAKE AURORA	139	129	119	109	99	89	79	69	59	49	39
02 HURON BEADLE	140	130	120	110	100	90	80	70	60	50	40
03 MARTIN BENNETT	140	130	120	110	100	90	80	70	60	50	40
04 BROOKINGS BROOKINGS	133	123	113	103	93	83	73	63	53	43	33
05 ABERDEEN BROWN	134	124	114	104	94	84	74	64	54	44	34
06 CHAMBERLAIN BRULE	140	130	120	110	100	90	80	70	60	50	40
07 NEWELL BUTTE	137	127	117	107	97	87	77	67	57	47	37
08 POLLOCK CAMPBELL	132	122	112	102	92	82	72	62	52	42	32
09 WAGNER CHARLES MIX	144	134	124	114	104	94	84	74	64	54	44
10 CLARK CLARK	136	126	116	106	96	86	76	66	56	46	36
11 VERMILION CLAY	151	141	131	121	111	101	91	81	71	61	51
12 WATERTOWN CODINGTON	136	126	116	106	96	86	76	66	56	46	36
13 MC INTOSH CORSON	137	127	117	107	97	87	77	67	57	47	37
14 MITCHELL DAVISON	142	132	122	112	102	92	82	72	62	52	42
15 WEBSTER DAY	137	127	117	107	97	87	77	67	57	47	37
16 CLEAR LAKE DEUEL	144	134	124	114	104	94	84	74	64	54	44
17 TIMBER LAKE DEWEY	137	127	117	107	97	87	77	67	57	47	37
18 ARMOUR DOUGLAS	143	133	123	113	103	93	83	73	63	53	43
19 HOT SPRINGS FALL RIVER	137	127	117	107	97	87	77	67	57	47	37
20 OELRICHS FALL RIVER	131	121	111	101	91	81	71	61	51	41	31
21 FAULKTON FAULK	136	126	116	106	96	86	76	66	56	46	36
22 MILBANK GRANT	141	131	121	111	101	91	81	71	61	51	41
23 GREGORY GREGORY	148	138	128	118	108	98	88	78	68	58	48
24 PHILIP HAAKON	138	128	118	108	98	88	78	68	58	48	38
25 CASTLEWOOD HAMLIN	132	122	112	102	92	82	72	62	52	42	32
26 MILLER HAND	138	128	118	108	98	88	78	68	58	48	38
27 ALEXANDRIA HANSON	143	133	123	113	103	93	83	73	63	53	43
28 REDIG HARDING	128	118	108	98	88	78	68	58	48	38	28
29 PIERRE HUGHES	148	138	128	118	108	98	88	78	68	58	48
30 MENNO HUTCHINSON	140	130	120	110	100	90	80	70	60	50	40
31 HIGHMORE HYDE	135	125	115	105	95	85	75	65	55	45	35
32 COTTONWOOD JACKSON	135	125	115	105	95	85	75	65	55	45	35
33 LONG VALLEY JACKSON	142	132	122	112	102	92	82	72	62	52	42
34 MURDO JONES	145	135	125	115	105	95	85	75	65	55	45
35 DE SMET KINGSBURY	142	132	122	112	102	92	82	72	62	52	42
36 MADISON LAKE	138	128	118	108	98	88	78	68	58	48	38
37 SPEARFISH LAWRENCE	139	129	119	109	99	89	79	69	59	49	39
38 KENNEBEC LYMAN	137	127	117	107	97	87	77	67	57	47	37
39 BRITTON MARSHALL	134	124	114	104	94	84	74	64	54	44	34
40 EUREKA MC PHERSON	133	123	113	103	93	83	73	63	53	43	33
41 LEOLA MC PHERSON	138	128	118	108	98	88	78	68	58	48	38
42 WOOD MELLETE	137	127	117	107	97	87	77	67	57	47	37
43 HOWARD MINER	135	125	115	105	95	85	75	65	55	45	35
44 SIOUX FALLS MINNEHAHA	142	132	122	112	102	92	82	72	62	52	42
45 FLANDREAU MOODY	138	128	118	108	98	88	78	68	58	48	38
46 RAPID CITY PENNINGTON	146	136	126	116	106	96	86	76	66	56	46
47 WASTA PENNINGTON	136	126	116	106	96	86	76	66	56	46	36
48 BISON PERKINS	136	126	116	106	96	86	76	66	56	46	36
49 GETTYSBURG POTTER	139	129	119	109	99	89	79	69	59	49	39
50 SISSETON ROBERTS	143	133	123	113	103	93	83	73	63	53	43
51 SUMMIT ROBERTS	137	127	117	107	97	87	77	67	57	47	37
52 FORESTBURG SANBORN	135	125	115	105	95	85	75	65	55	45	35
53 REDFIELD SPINK	137	127	117	107	97	87	77	67	57	47	37
54 ONIDA SULLY	137	127	117	107	97	87	77	67	57	47	37
55 MISSION TODD	143	133	123	113	103	93	83	73	63	53	43
56 WINNER TRIPP	147	137	127	117	107	97	87	77	67	57	47
57 CENTERVILLE TURNER	145	135	125	115	105	95	85	75	65	55	45
58 MOBRIDGE WALWORTH	136	126	116	106	96	86	76	66	56	46	36
59 YANKTON YANKTON	152	142	132	122	112	102	92	82	72	62	52
60 DUPREE ZIEBACH	136	126	116	106	96	86	76	66	56	46	36

(DATA SOURCE: SOUTH DAKOTA AGRICULTURAL STATISTICS SERVICE)