Yard and Garden -01-08-2011 - Ted Griess/ Extension Horticulture Assistant

Getting used to it is difficult. One might quickly assume I am referring to adjusting to the New Year. Although I must admit that it usually takes me nearly a month before I consistently write the correct year on my correspondence, such is not my concern.

Each passing year, I find it more difficult to get used to winter and all the bone-chilling cold weather it brings. For the past three months, our autumn weather in Central Nebraska remained relatively mild. Certainly, we experienced a number of evenings with freezing temperatures, but frequently daytime temperatures reached into the 40's and a number of days into the 50's.

Then it happened. Just a few days before Christmas, winter officially arrived, and with it colder temperatures. By the turn of the calendar to 2011,

experienced freezing winds, snow and temperatures dipping into the single digits. For the past few mornings, while having my first cup of coffee for the day, I've shuddered

and shivered just listening



Temperature (°F)																			
	Calm	40	35	30	25	20	15	10	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45
	5	36	31	25	19	13	7	1	-5	-11	-16	-22	-28	-34	-40	-46	-52	-57	-63
	10	34	27	21	15	9	3	-4	-10	-16	-22	-28	-35	-41	-47	-53	-59	-66	-72
	15	32	25	19	13	6	0	-7	-13	-19	-26	-32	-39	-45	-51	-58	-64	-71	-77
	20	30	24	17	11	4	-2	-9	-15	-22	-29	-35	-42	-48	-55	-61	-68	-74	-81
F G	25	29	23	16	9	3	-4	-11	-17	-24	-31	-37	-44	-51	-58	-64	-71	-78	-84
Wind (mph)	30	28	22	15	8	1	-5	-12	-19	-26	-33	-39	-46	-53	-60	-67	-73	-80	-87
Pu	35	28	21	14	7	0	-7	-14	-21	-27	-34	-41	-48	-55	-62	-69	-76	-82	-89
×	40	27	20	13	6	-1	-8	-15	-22	-29	-36	-43	-50	-57	-64	-71	-78	-84	-91
	45	26	19	12	5	-2	-9	-16	-23	-30	-37	-44	-51	-58	-65	-72	-79	-86	-93
	50	26	19	12	4	-3	-10	-17	-24	-31	-38	-45	-52	-60	-67	-74	-81	-88	-95
	55	25	18	11	4	-3	-11	-18	-25	-32	-39	-46	-54	-61	-68	-75	-82	-89	-97
	60	25	17	10	3	-4	-11	-19	-26	-33	-40	-48	-55	-62	-69	-76	-84	-91	-98
Frostbite Times 30 minutes 10 minutes 5 minutes																			
Wind Chill (°F) = $35.74 + 0.6215T - 35.75(V^{0.16}) + 0.4275T(V^{0.16})$ Where, T= Air Temperature (°F) V= Wind Speed (mph) Effective 11/01/01														/01/01					

to the local weatherman forecast temperatures. Frequently, he refers to something called the wind chill index.

Have you ever wondered about this terminology? What is its significance? In my younger years, references to wind chill indices were not used. I attempted to find out when it became part of the norm in a winter weather report, but I was not able to find the answer. My best guess is that

sometime in the 70's we first began hearing those words. I am embarrassed to admit it, but initially I thought they were saying windshield index. Obviously, I could see no relevance with such an index; thus I paid little attention. Perhaps such thinking may support why Rita often accuses me of not being a good listener.

Finally, after realizing weather reporters were saying wind chill index, I became deeply interested. Did you know that wind chill index is associated with only warm-blooded living creatures? That includes the group called mammals, to which we humans belong. I define wind chill index as how cold the air feels on one's face based on the rate of heat loss from exposed skin caused by wind and cold temperatures.

Attached is a copy of the National Weather Service's (NWS) wind chill chart and the formula it uses to calculate the index. The NWS chart is very useful in calculating the dangers from winter winds and freezing temperatures. The index calculates wind speed at an average height of five feet, the typical height of an adult human face.

Wind chill index certainly has nothing to do with the windshield of your vehicle, nor for that matter, does it have any effect on the ability of your vehicle's engine to start on a cold winter's morning. I have often heard that if one has his or her vehicle parked facing into the wind, the wind chill index will affect its ability to start. The fact is inanimate objects such as cars are not cooled below the actual temperature. The wind may simply cause the car to reach the actual temperature more quickly after the engine is turned off.

Now that winter is officially here, before venturing outdoors, I urge each of you to pay close attention to the wind chill index and particularly note how quickly frostbite can occur.

It is a fact; I hate cold winter weather and getting used to it is difficult.