

**Fire Weather Forecast for Forest Management Division, GNWT, issued by True North Weather at 11:15 am Tuesday July 8, 2008. Forecast valid for Today, Tonight and Wednesday with an extended outlook for the next five days.**

**FIRE WEATHER ADVISORY ISSUED FOR:**

**SMITH  
HAY  
WBNP  
NORTH SLAVE  
SIMPSON  
LIARD  
SAHTU**

***Part 1 of 3***

**Synopsis**

**UPPER RIDGE BREAK DOWN IN PROGRESS...WINDY DRY AND UNSTABLE FIRE ENVIRONMENT MANY ZONES...EXTREME CAUTION...**

A vigorous upper trough will trigger upper ridge break down conditions in the NWT today and Wednesday. A deep surface low is scheduled to develop over southeastern Great Bear Lake today, with a sharpening cold front extending from the low to near Fort Liard by 6pm tonight.

Ahead of the cold front, through the Deh Cho, Hay and western North Slave, severe fire weather conditions will exist today, **with blow up fire conditions highly possible in regions where fuels have undergone significant drying over the past week.** A low level jet and tight pressure gradient will yield extremely strong winds to these zones today, while the upper cold trough and cold front rapidly destabilize the atmosphere. A warm and dry air mass in these areas will support dry lightning today.

Further north, near the developing surface low, heavy shower and thundershower activity will form from about Wrigley to just north of Norman Wells today, while just the odd thundershower is possible across the northern portion of the Sahtu. The air mass will continue to be much drier and more stable across the Inuvik region today as upper ridging tries to maintain its grip over the area.

Another dangerous fire weather day is in store for the NWT on Wednesday as the upper ridge break down continues. A very unstable, windy and highly sheared fire environment will grip southern zones. Lightning will spread eastward ahead of the sharp cold front – moving into the Smith/WBNP and the remainder of the North Slave throughout the day. RH values will rise a bit from today's low readings, fostering more in the way of shower activity with any build ups.

Winds will continue to be of the utmost concern Wednesday, sharply turning to strong west to southwest behind the frontal zone. Some scattered showers and thundershowers will linger west of the front Wednesday as the air mass continues to cool aloft. A pronounced low level jet will not only help to raise wind speed values over the south, but it will also help to create significant wind shear in the lower atmosphere. Caution.

Further north, heavy showers or even an area of rain is likely across the Norman Wells-Wrigley-Great Bear Lake area Wednesday. Our model output shows potential for 25mm of precipitation in these zones.

Our models are consistently keeping the heaviest band of precipitation in a very narrow zone, and maintain relatively dry conditions from Inuvik to Fort Good Hope Wednesday. Some thundershower activity may pop up in these zones, however.

***Fire Weather Forecast – Part 2 of 3***

## Regional Forecasts

Today and next day... maximum temperature, minimum RH during burning period, maximum windspeed.  
Tonight... minimum temperature, maximum RH, average windspeed overnight.

Weather	T	RH	Wind dir/speed	Remarks
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### Smith

**FIRE WEATHER ADVISORY – LOW RH VALUES; WINDY**

Today...VERY DRY AND WINDY. PATCHY CLOUD	24	25	SE 20G30	
Tonight...PATCHY CLOUD. WINDY	13	60	SE 15	Mod RH recovery
Wednesday...PM THUNDERSHOWERS. WINDY	24	35	SLY 20G30	

### Hay

**FIRE WEATHER ADVISORY – DRY LIGHTNING; WINDY**

Today...ISOL PM TSHWRS W. WARM. DRY. WINDY	26	30	SE 25G35	Dry lightning; LLJ
Tonight...THUNDERSHOWERS. WINDY	15	60	SLY 20	Mod RH recovery
Wednesday...THUNDERSHOWERS. WINDY	23	35	Becoming SW 25G35	LLJ

### Wood Buffalo

**FIRE WEATHER ADVISORY – RISK DRY LIGHTNING**

Today...DRY AND WINDY. CHNC LATE PM TSHWR CARIBOU	24	30	SE 15G25	Risk dry lightning
Tonight...CHNC EVE TSHWRS CARIBOU	12	70	SE 10-15	
Wednesday...PM THUNDERSHOWERS. WINDY	24	35	SLY 20G30	

### North Slave

**FIRE WEATHER ADVISORY – DRY; EXTREME WINDS; DRY LIGHTNING**

Today...DRY AND VERY WINDY. ISOL PM TSHWRS WEST AND NORTH	24	30	SE 30G50	Dry lightning; LLJ
Tonight...ISOL TSHWRS N AND W. WINDY	14	60	S 25	Mod RH recovery
Wednesday...PM THUNDERSHOWERS. WINDY	21	35	SLY 25G35	LLJ

### Simpson

**FIRE WEATHER ADVISORY – HEAVY THUNDERSTORMS NORTH; RISK DRY LIGHTNING SOUTH**

Today...PM TSHWRS. WINDY	25	35 S 45 N	S 20G30	Heavy storms N Risk dry LTG S
Tonight...HEAVY STORMS N. SCT TSHWRS S	14	75	W-SW 15	
Wednesday...HEAVY SHWRS/TSHWRS NORTH. CHNC SHWRS/TSHWRS SOUTH	23 S 19 N	35 S 50 N	SW 20G30 S NW 15G20 N	

### Liard

**FIRE WEATHER ADVISORY – LOW RH VALUES; VERY STRONG WINDS**

Today...MAINLY SUNNY. VERY DRY. VERY WINDY	24	25	SW 25G40	
Tonight...CHNC EVE TSHWRS. WINDY	13	70	SW 20	
Wednesday...PM TSHWRS. WINDY	21	35	SW 20G30	

### Sahtu

**FIRE WEATHER ADVISORY – LIGHTNING OUTBREAK; VARIABLE FIRE WEATHER**

Today...SHOWERS AND THUNDERSHOWERS	21 S 25 N	45 S 35 N	VRBL 15G20 W SE 30G40 E	
Tonight...HEAVY STORMS SOUTH. SCT SHWRS/TSHWRS NORTH	13	85	VRBL 15 W SE 25 EAST	
Wednesday...HEAVY SHWRS/TSHWRS S. SCT SHWRS/TSHWRS N	20	50	VRBL 15G25	

**Inuvik**

Today...MAINLY SUNNY. VERY WARM	26	35	VRBL 15G20	
Tonight...CHNC TSHWRS WEST AND SOUTH	13	80	Becoming NLY 10	
Wednesday...ISOL PM TSHWRS	23	35	NLY 15G25	

**500 MB actuals and forecast:**

YSM... 63 (actual today)...59 (forecast Wednesday)...64 (average)

YZF... 63 ...57 ...63

YFS... 59 ... 52 ...64

YVQ... 60 ... 55 ...63

YEV... 57 ... 55 ...61

***Fire Weather Forecast – Part 3 of 3*****Extended Outlook**

The NWT will plummet into a deep upper trough by Thursday. High RH values, lower temperature readings, and a few showers will dominate in most zones. Thundershowers will linger over the Smith/WB area.

Rapid recovery is expected across the southern NWT on Friday as upper ridging moves back into the weather picture. Showers will continue over much of the Sahtu. Meanwhile, a downturn in conditions is finally anticipated over the Inuvik region Friday as a cold arctic vortex rotates into the Arctic Ocean.

Another active fire weather day is in store for the southern NWT Saturday and Sunday as an upper cold trough triggers a temporary upper ridge breakdown. Widespread lightning is expected across the Deh Cho, southern North Slave, South Slave and WBNP. Recovery is expected in the Sahtu as surface ridging brings sunnier skies and drier weather to the area.

In the longer term, our models are continuing to re-build upper ridging back into all of the NWT by mid-month. It is becoming increasingly clear that our models are having a difficult time with this ridging episode due to the abundance of upper level disturbances embedded in the mean flow pattern. In essence, it would appear that we are in store for an overall “upper ridging” episode, interrupted by a number of temporary upper ridge breakdowns. In terms of fire weather, this would indicate that we are in store for a rather active lightning regime through to at least the third week of July.

**END/ARCHIBALD**