



## Weather and Climate



### Yukon-Charley Rivers Spring 2013 Weather Summary

Was spring 2013 normal?

It was a cold and snowy spring...8.0° F colder than normal in Eagle, with a spring snowfall total of 31.1 inches, which is more than 300% of normal.

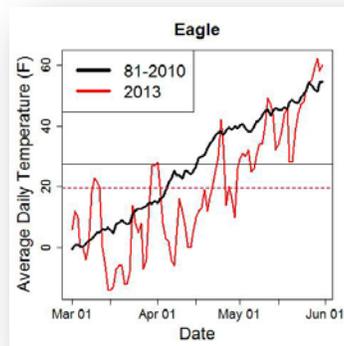
It was the coldest April on record. The average monthly temperature for April 2013 was 3.8°F - breaking the old record of 15.5°F in 1986.

Total snowfall for April 2013: 17.9 inches- the second largest snowfall total on record for April, behind 1992 with 19.5 inches.

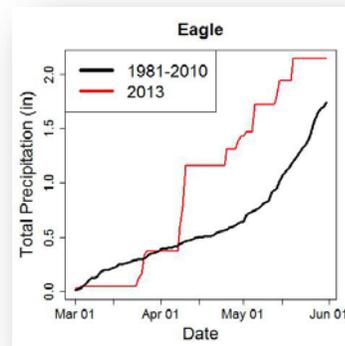
Other records:  
April 14: 42°F  
April 19: 40°F  
Lowest maximum daily temperatures on record.

In Eagle, spring 2013 was cold and snowy. The average temperature for March was 3.9° F colder than normal, with 6.2 inches of snow for the month, which is just about normal. The average temperature for April was 13.8°F, more than 15 degrees colder than normal and the coldest on record. No new minimum temperature records were broken, but two low maximum records were set. An impressive 17.9 inches of snow fell during April; normal snowfall is 3.1 inches for the month. Most of the snow fell between April 8 and 10, when a total of 14.4 inches of snow was recorded during the 3 day period. The total precipitation for the month was 1.06 inches, normal is 0.30 inches. The temperatures remained cool through most of May and the snow continued to fall. The average temperature for May was 41.2°F, almost 5° F colder than normal. The snowfall total for the month was 7.0 inches; normally, less than 1 inch of snow falls in Eagle during May. The 2012-2013 seasonal snowfall by May 31 was 83.1 inches, which is 134% of normal. The snow-off date, which is the last day of where there is measureable snow on the ground, was May 22.

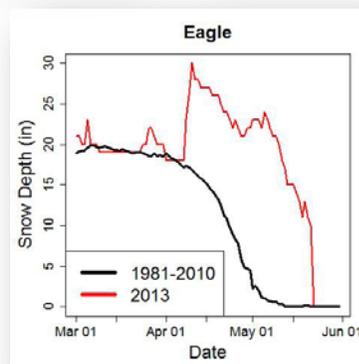
Eagle – Average Air Temperatures



Eagle – Cumulative Precipitation



Eagle – Cumulative Snow Depth



# Yukon-Charley Rivers Spring 2013 Weather Summary

## Eagle Weather Records:

Climate Normal Period 1981 – 2010

Climate Record Period 1949 – 2013

### Temperature

Spring 2013	Average Monthly Temp °F	1981-2010 Normal °F	Departure from Normal °F	Monthly High °F / Date	Monthly Low °F / Date
March	3.3	7.2	-3.9	42 / Mar 31	-33 / Mar 16, 20, 21
April	13.8	28.9	-15.1	52 / Apr 23, 24	-22 / Apr 6
May	41.2	46.1	-4.9	81 / May 28	12 / May 6

Spring Season Temperature Departure from Normal: -8.0°F

### Precipitation

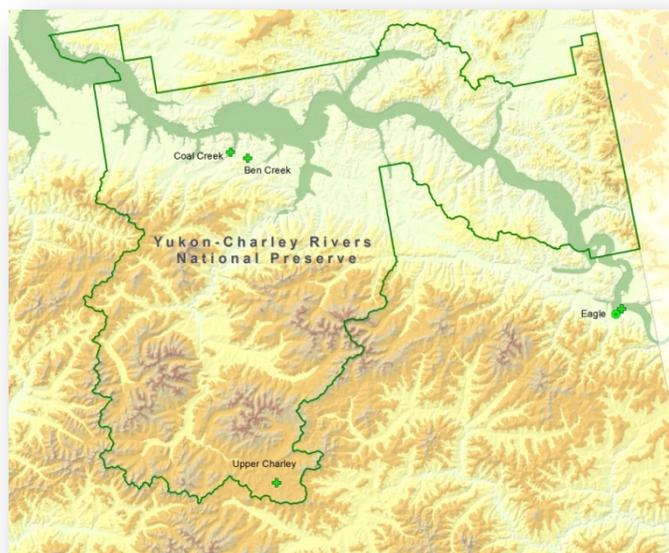
Spring 2013	Total Monthly Precip. in.	1981-2010 Normal in.	Departure from Normal in.	Greatest 24 –hr. total in. / Date	# Days with >=0.01 in. water
March	0.37	0.40	-0.03	0.18 / Mar 26	6
April	1.06	0.30	+0.76	0.38 / Apr 10	6
May	0.71	1.10	-0.39	0.25 / Apr 5	5

Spring Season Departure from Normal: +0.11inches

### Snowfall

Spring 2013	Total Monthly Snowfall in.	1981-2010 Normal in.	Departure from Normal in.	Greatest 24 – hr. snowfall total in. / Date	2012-2013 snowfall from July 1 in.	Normal Snowfall from July 1 - in.	Snow Depth End of Month In.
March	6.2	6.1	+0.1	3.4 / Mar 26	58.2	58.1	20
April	17.9	3.1	+14.8	5.4 / Apr 10	76.1	60.8	22
May	7.0	0.9	+6.1	3.0 / Apr 5, 19	83.1	61.8	0

As part of the climate monitoring vital sign, additional NPS climate stations were installed in the preserve to complement the long-term record available from the National Weather Service station in Eagle. These additional sites provide critical data that help characterize the climate gradients and patterns affecting resources in Yukon-Charley Rivers National Preserve.



# Yukon-Charley Rivers Spring 2013 Weather Summary

Yukon-Charley Rivers Remote Automated Weather Station (RAWS) summaries – Spring 2013:

Site	Elev. Ft.	Average Temp °F			Spring 2013	Extremes °F		Peak Wind mph	High T – Low T °F *
		Mar	Apr	May	Avg. Temp °F	High	Low		
Coal Creek	870	3.4	16.5	41.4	20.4	81	-35	12	116
Upper Charley River	3654	6.9	12.0	35.8	18.2	64	-19	25	83
Ben Creek	1850	m	17.3	43.2	---	77	m	26	---

\* Difference between the high and low temperature for season.

Interesting notes from RAWS stations:

- The Ben Creek fire weather station, which is maintained by the BLM Alaska Fire Service staff for fire weather data, powered back up in mid-March when enough sunlight reached the solar panels to charge the battery that powers the station.
- Coal Creek, the low elevation site, remained cooler through March while the winter inversion pattern still dominated; as more solar radiation reached the northern latitudes in April the pattern switched and the higher elevations were cooler than the river valleys.
- The spring temperature spread of 116 degrees was not far behind the impressive fall 122 degree temperature spread at Coal Creek.



Upper Charley River Climate Station

## Connecting Further

[Central Alaska Network climate monitoring vital sign](#)

Access near real-time data from [Western Regional Climate Center](#) and [MesoWest](#)

Check out the Jul-Aug-Sep weather outlook from the [NOAA Climate Prediction Center](#)

Statewide summary of weather highlights in the latest [Alaska Climate Dispatch](#) from the Alaska Center for Climate Assessment and Policy

[Map](#) of projected temperature and precipitation changes in Yukon-Charley Rivers National Preserve.

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Please Note: The summarized data are preliminary and have not undergone final quality control. Therefore, these data are subject to revision.