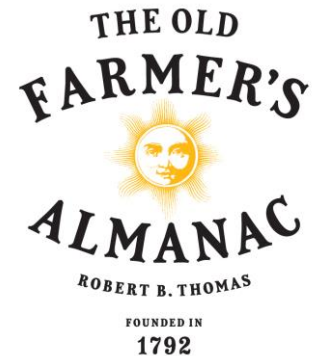


***“Secrets of Old Farmer’s Almanac
Prairie Forecasts,
What’s Predicted for Weather in 2020, and
Other Stuff I Probably Shouldn’t Be Telling You”***

Jack Burnett, Managing Editor, *The Old Farmer’s Almanac*

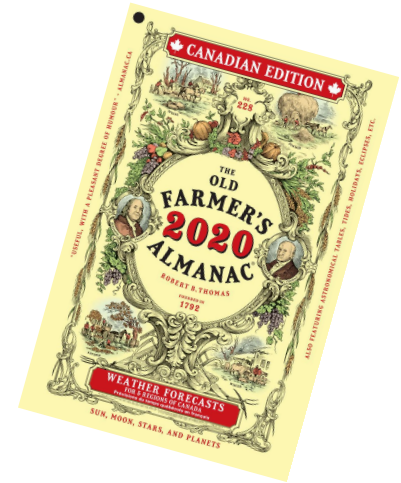


POGA 22nd AGM and Conference

December 5, 2019 • Winnipeg

This Morning's Forecast

- A Very Brief History of *The Old Farmer's Almanac*
- How the Almanac Makes Its Forecasts
- Weather 101: How Air Masses Work
- Weather 201: Uh, Things Are Starting to Get a Little Complicated!
- Solar Cycles and Sunspots
- OFA Winter 2019–2020 Forecast
- OFA Summer 2020 Forecast
- *Almanac Tales & Trivia*: Abraham Lincoln and the Murderer, the German Spy Who Loved Us, and the “Old Farmer” and the Volcano



A Very Brief History of *The Old Farmer's Almanac*

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FARMER'S ALMANAC** FOUNDED IN 1792 [GET A COPY!](#)

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[Gardening » Frost Dates Calculator](#)

FIRST AND LAST FROST DATES

[SEE FROST DATES FOR YOUR LOCATION](#)
 [Search](#)

Use our frost dates calculator to find the **average date** of the **last spring frost** and **first fall frost** for locations across the U.S. and Canada. Simply enter your ZIP or Postal code in the field below to see frost dates for your location (based on the nearest weather station).

WHAT ARE FROST DATES?

A **frost date** is the average date of the first or last light freeze that occurs in spring or fall. Note that local weather and topography may cause considerable variations. **The probability of frost occurring after the given spring dates and before the given fall dates is 30 percent.**

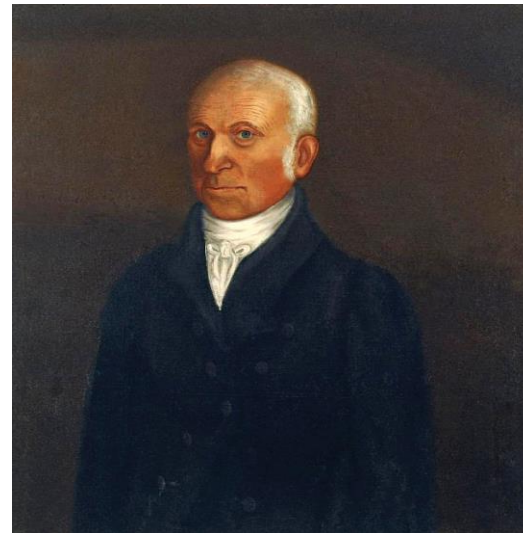
The classification of freeze temperatures is based on their effect on plants:

- **Light freeze:** 29° to 32°F—tender plants are killed.
- **Moderate freeze:** 25° to 28°F—widely destructive to most vegetation.
- **Severe freeze:** 24°F and colder—heavy damage to most plants.

Frost dates are calculated based on data from the NOAA National Centers for Environmental Information.

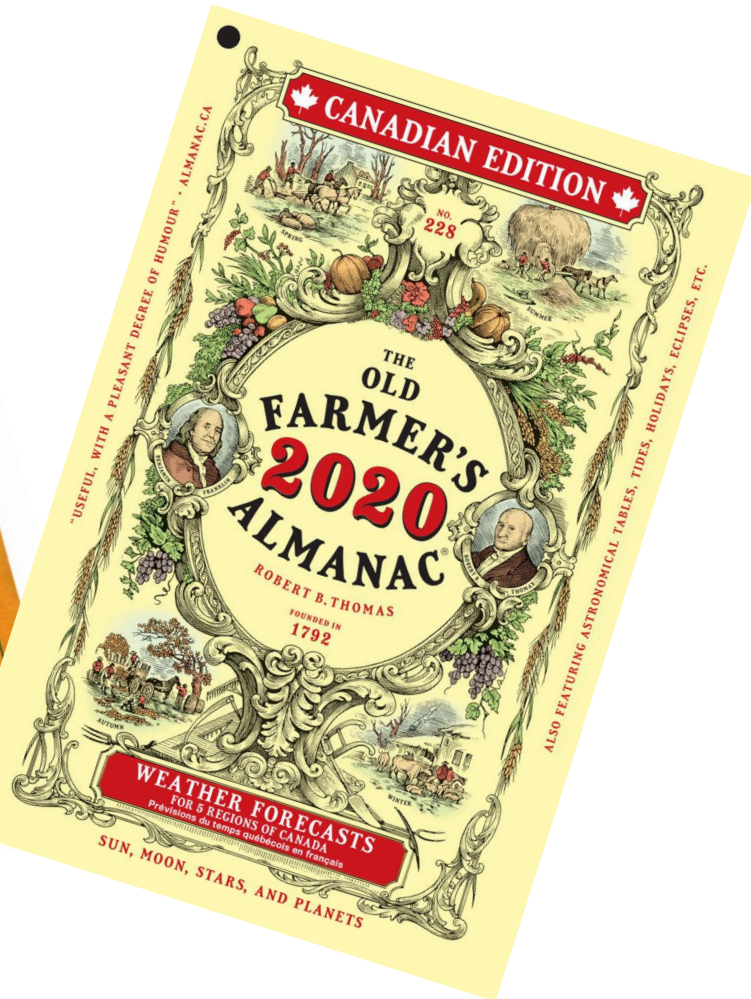
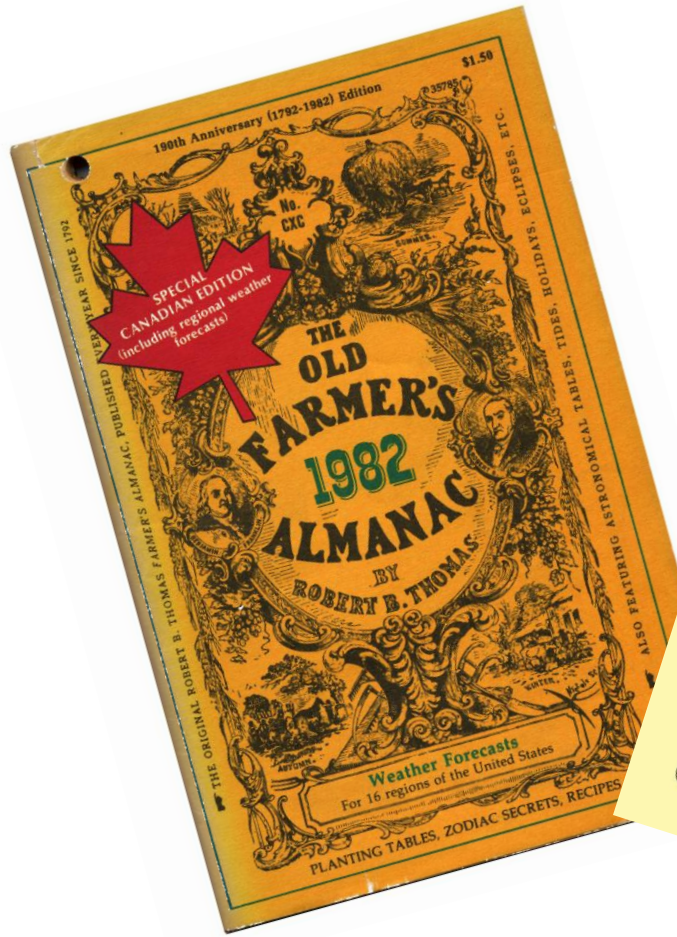
Wondering when to plant what? Get a head start on gardening with our Planting Calendar, customized to your location!

[Browse Frost Date Locations by State or Province](#)



- Founder Robert B. Thomas (1766–1846)
- Special Canadian Edition (1982)
- Why an almanac?
- Almanac.ca

The OFA's Canadian Edition began in 1982.



How the Almanac Makes Its Forecasts

- Meteorology
- Climatology
- Solar Cycles (Sunspots)

* * * * *

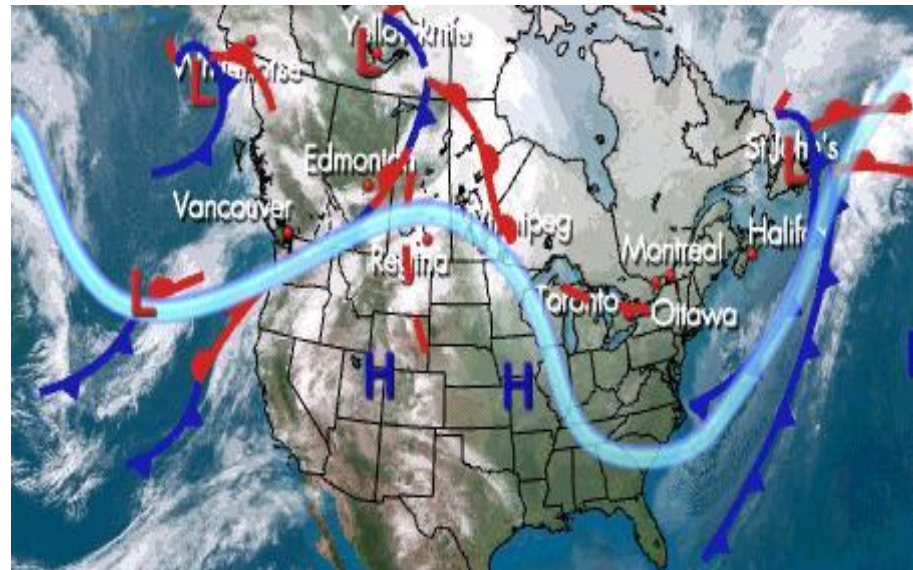
- “Analog”
- Climate Change



Weather 101:

How Air Masses Work

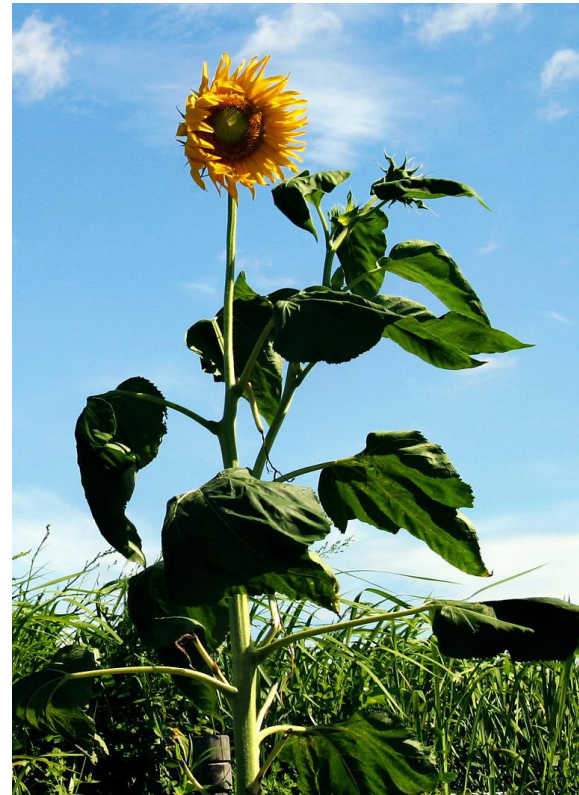
- What Is Air?
- Highs and Lows
- Where Winds Blow
- Borderline Behavior



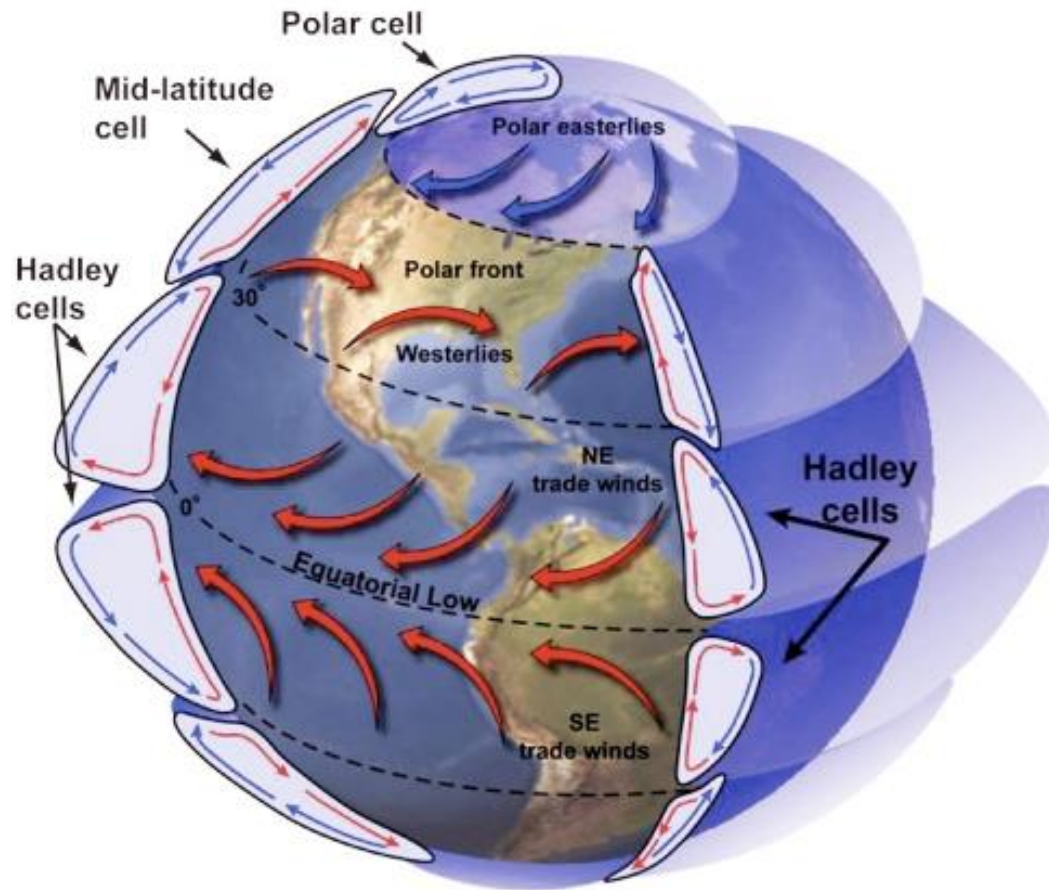
Weather 201:

Uh, Things Are Starting to Get a Little Complicated!

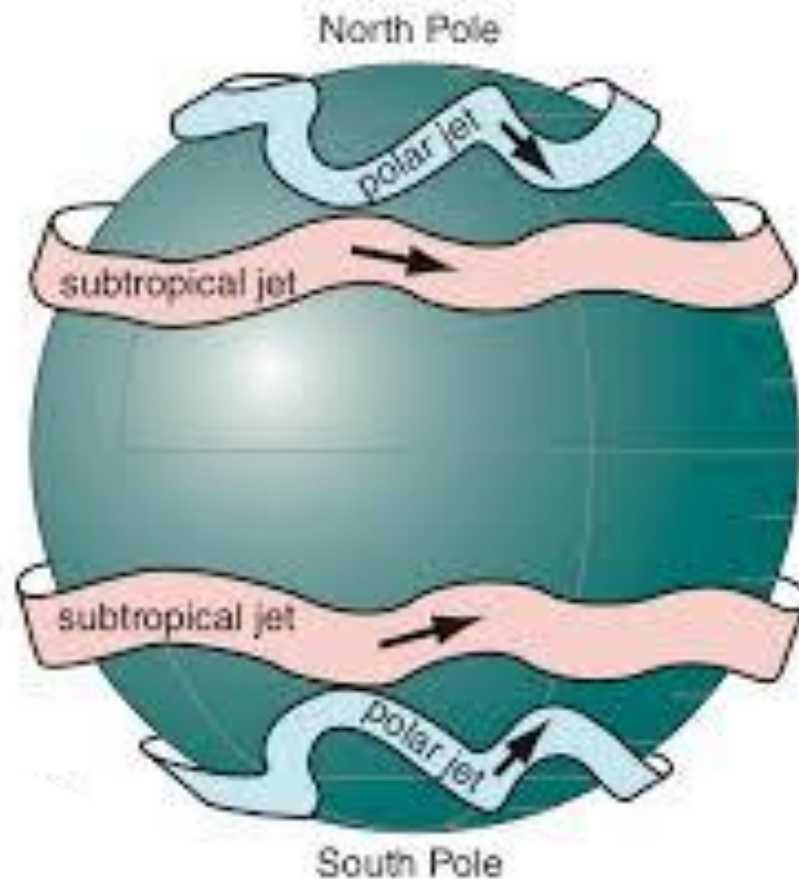
- World Wind Belts
- Jet Streams
- Teleconnections and Oscillations
 - ENSO
 - Arctic Oscillation
- Solar Cycles (Sunspots)



World Wind Belts



Jet Streams

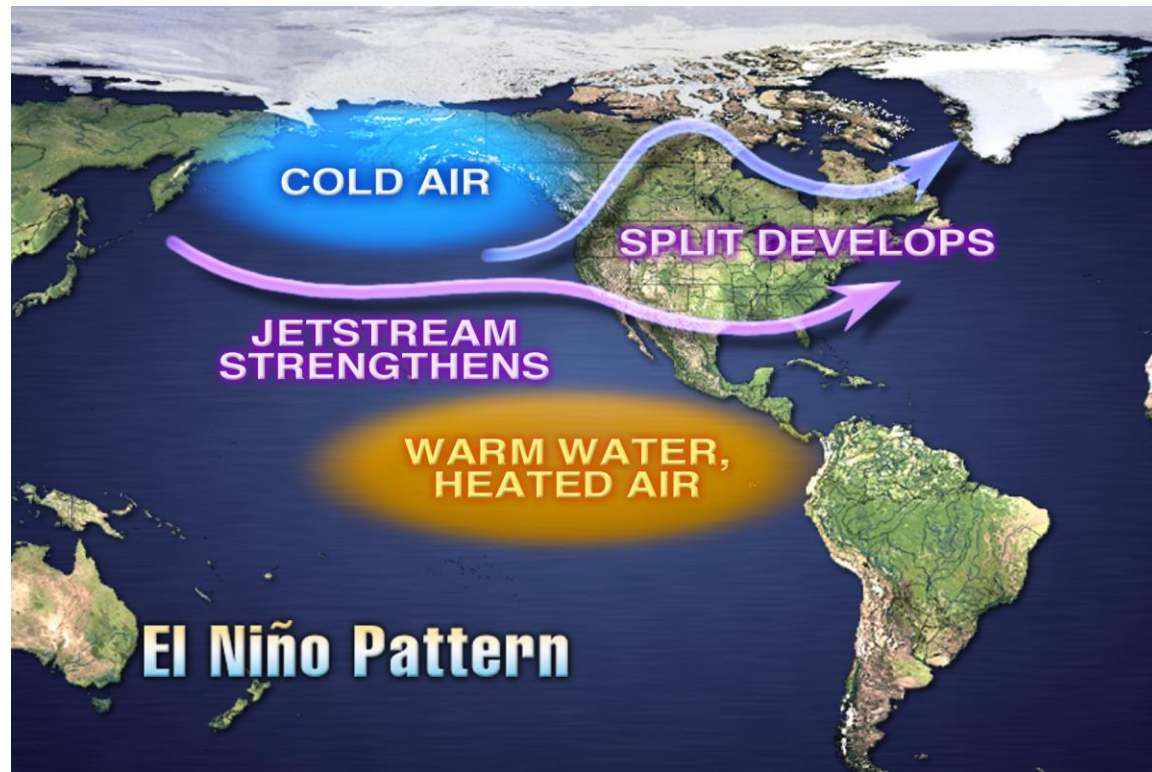


Teleconnections and Oscillations

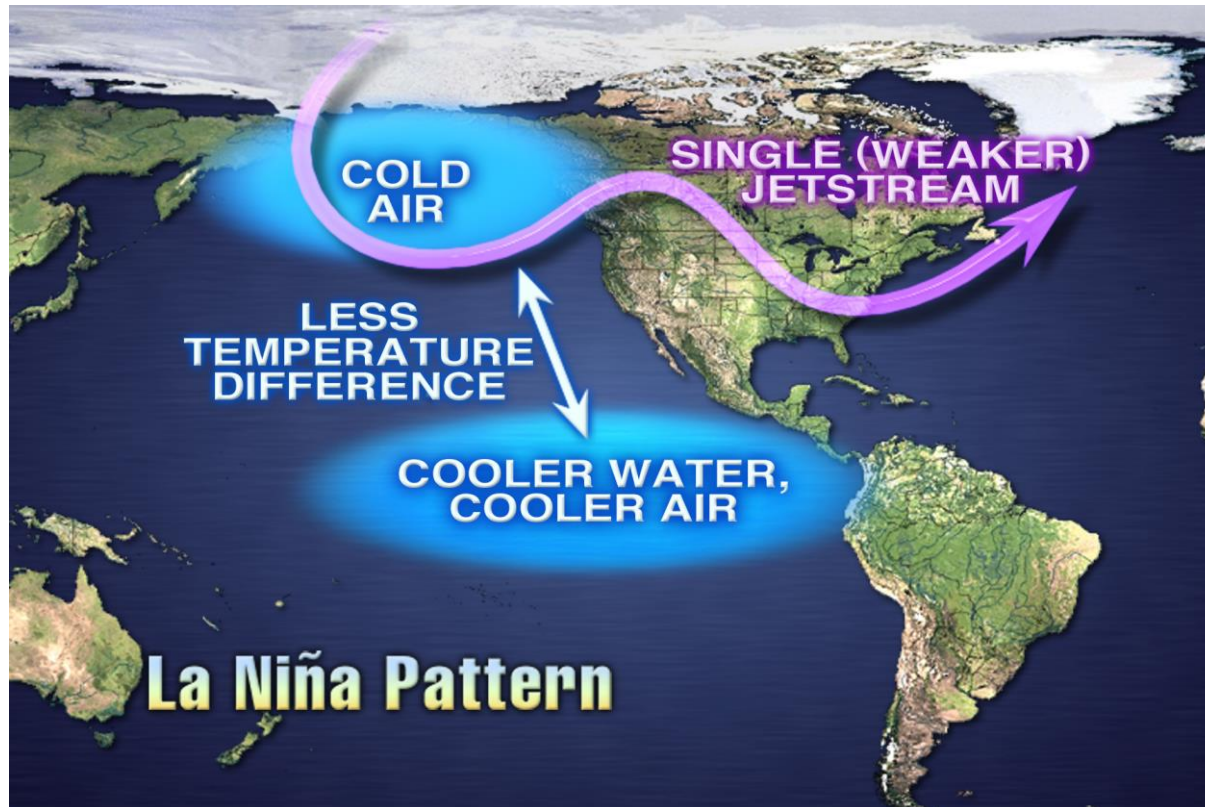
- ENSO: El Niño–Southern Oscillation
- Arctic Oscillation (AO)/North Atlantic Oscillation (NAO)



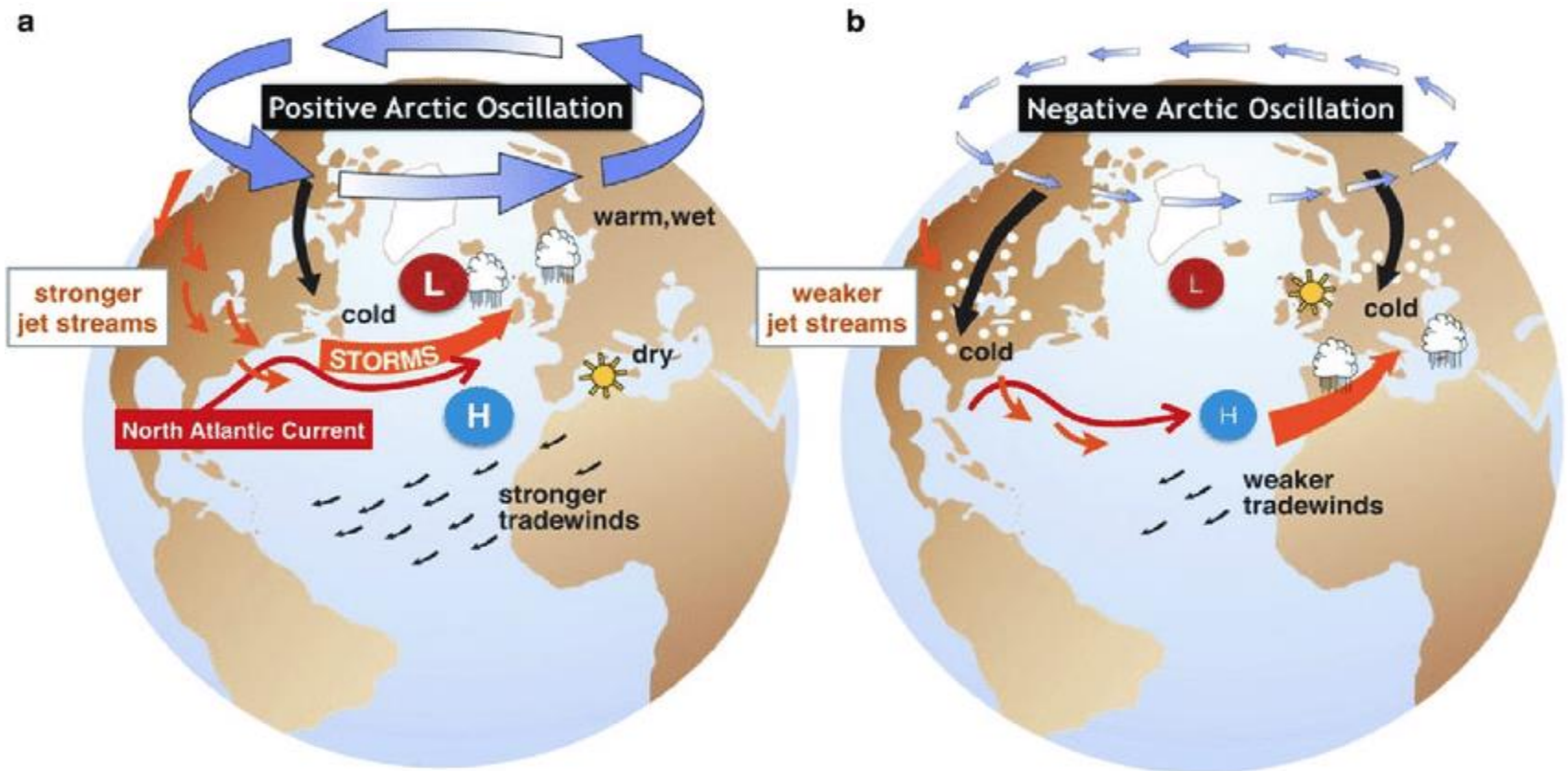
El Niño



La Niña

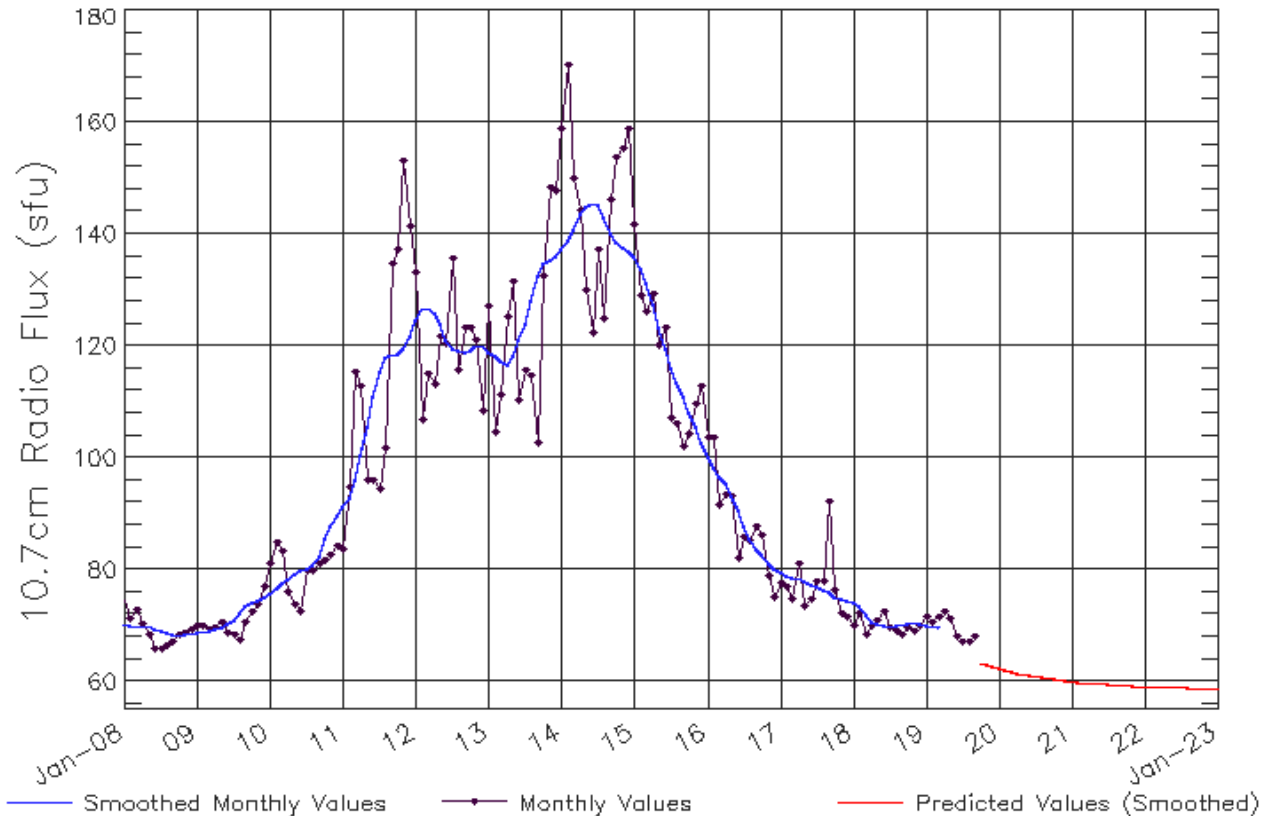


Arctic Oscillation (AO)



Solar Cycles (Sunspots)

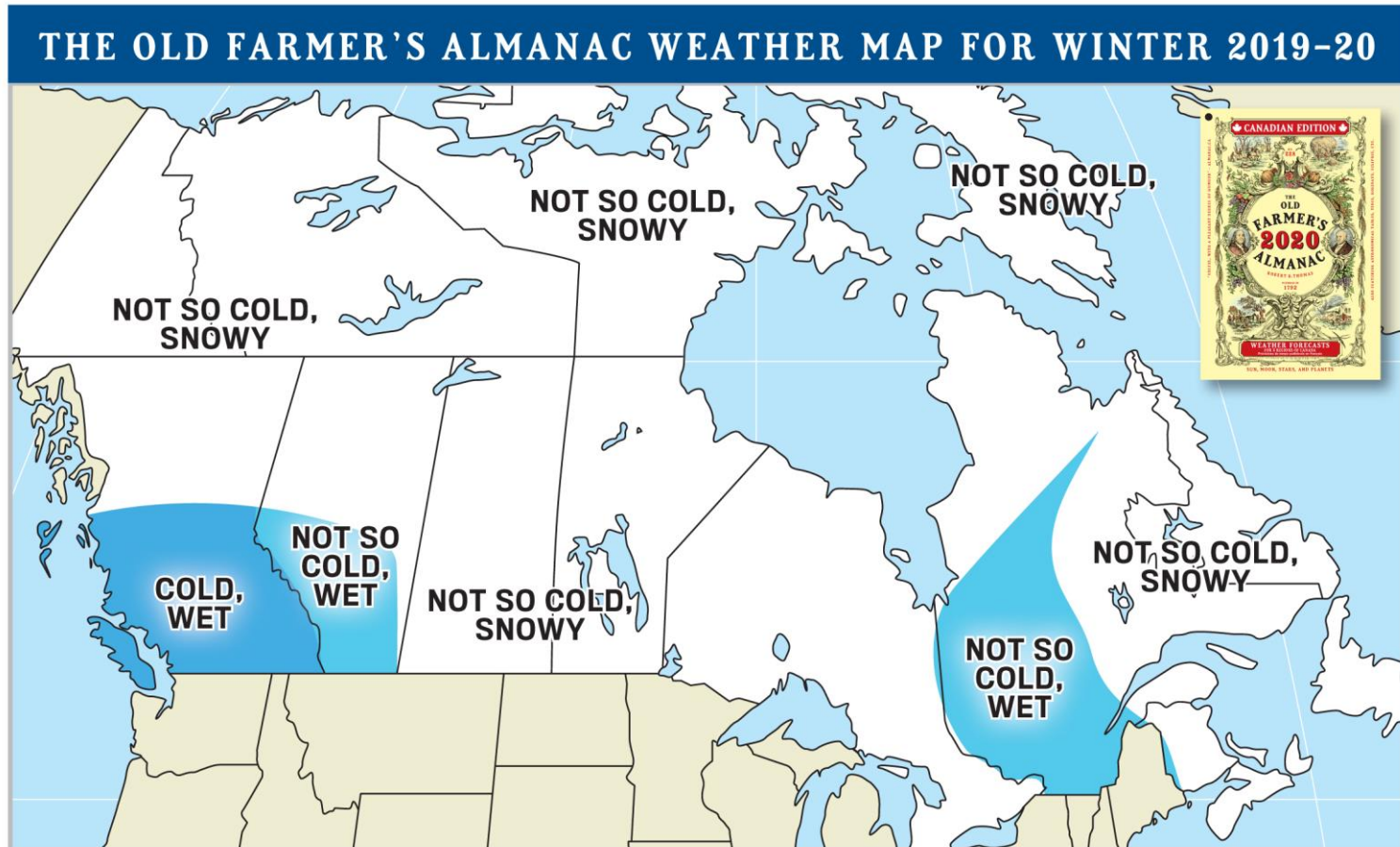
ISES Solar Cycle F10.7cm Radio Flux Progression
Observed data through Sep 2019



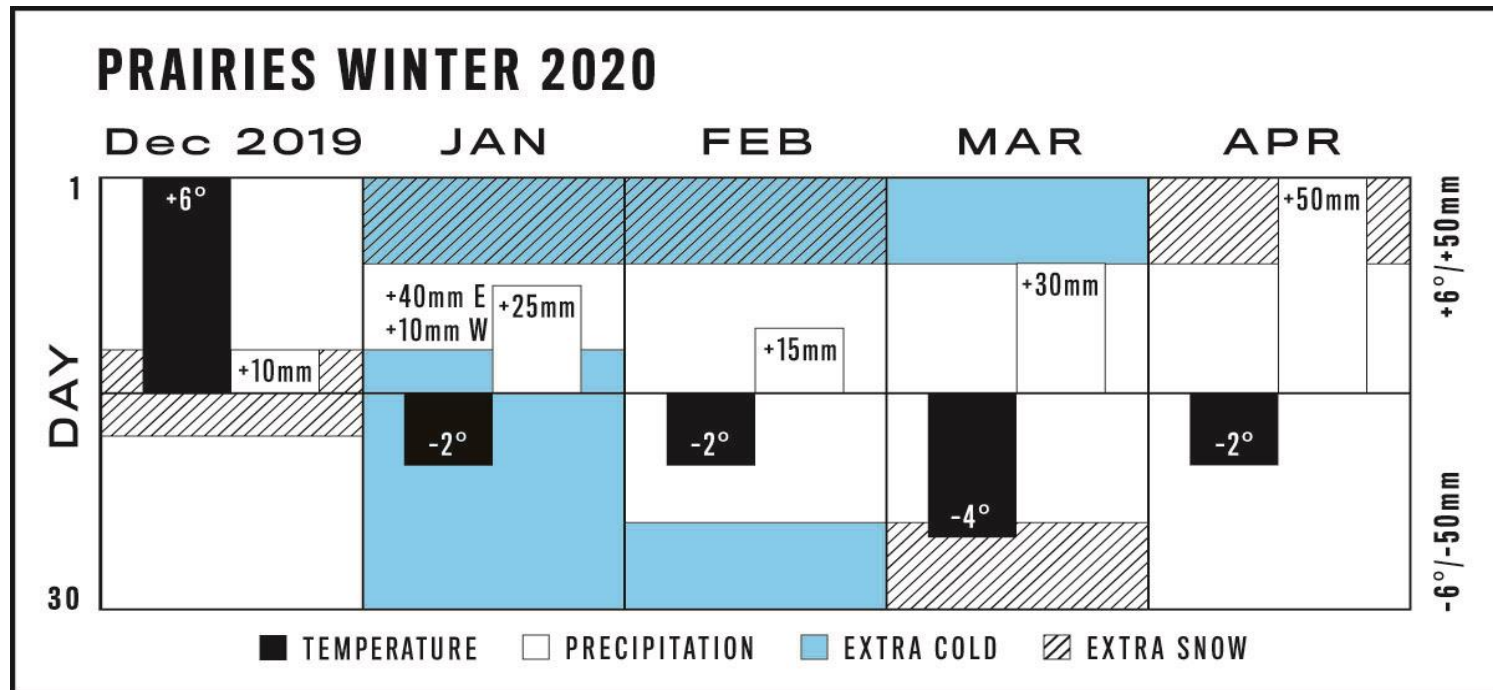
Updated 2019 Oct 7

NOAA/SWPC Boulder, CO USA

OFA 2019–2020 Winter Forecast



Winter 2019–2020 Month by Month



- *Winter:*

Temps \geq normal, slightly

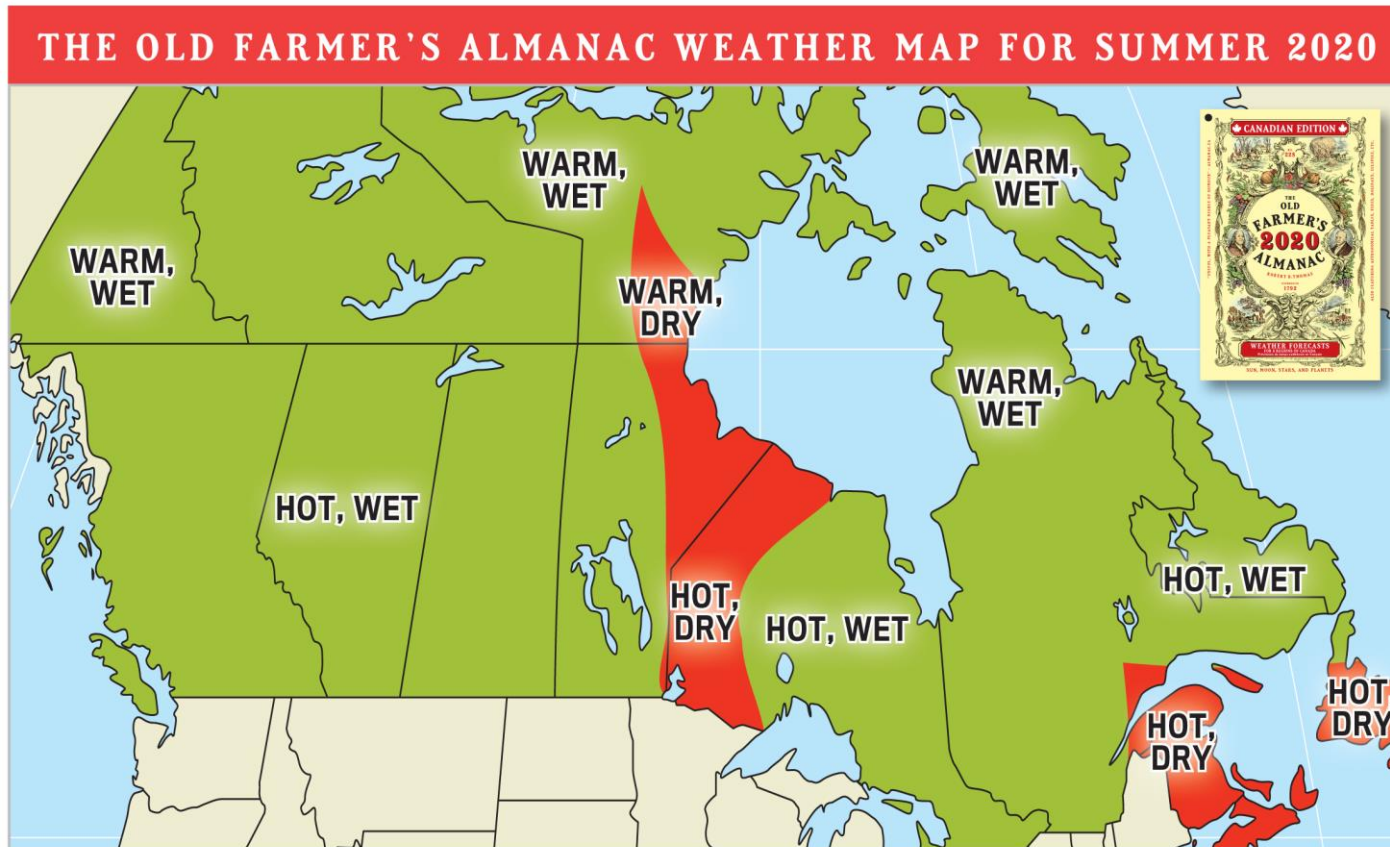
Precip $>$ normal

Snow $<$ normal W

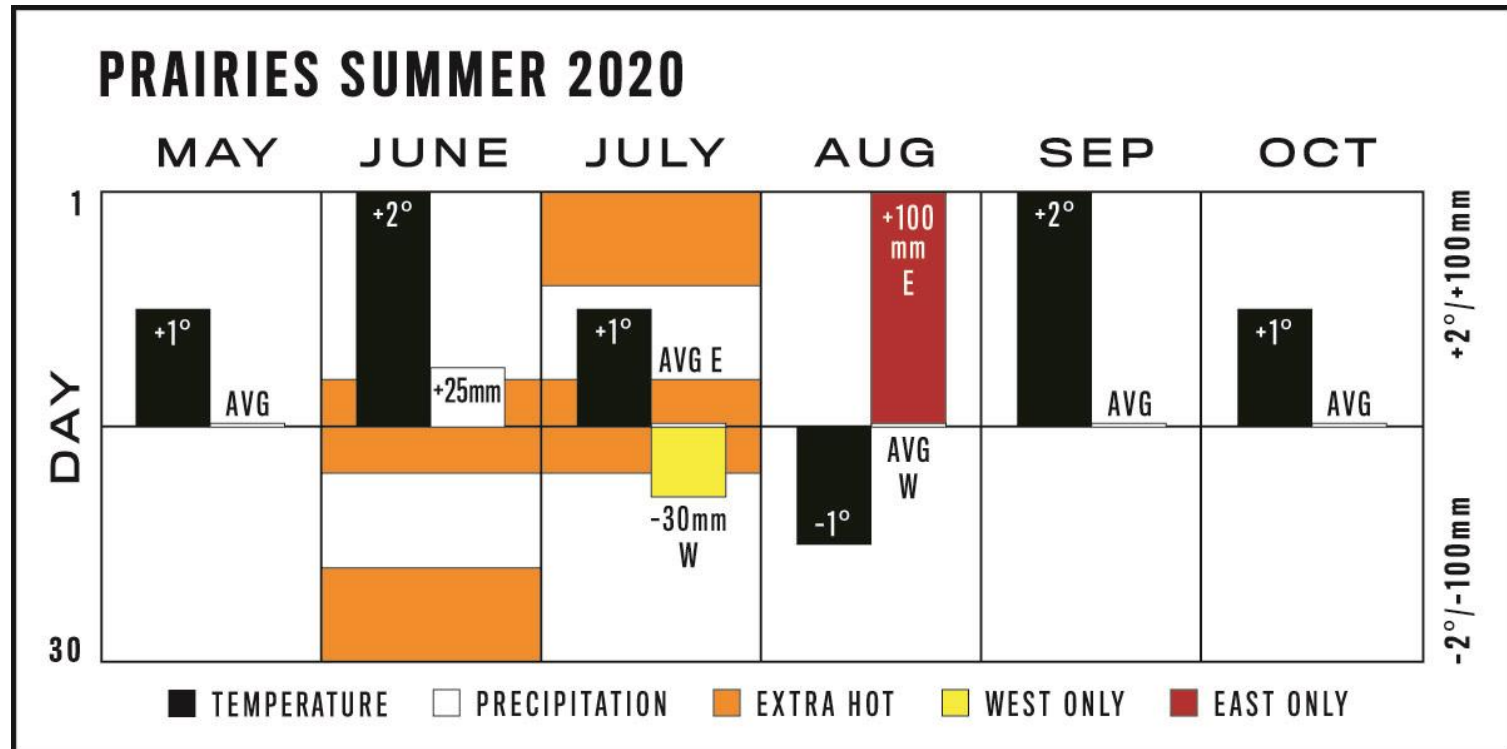
$>$ normal elsewhere

- *Spring:* cooler, rainier

OFA 2020 Summer Forecast



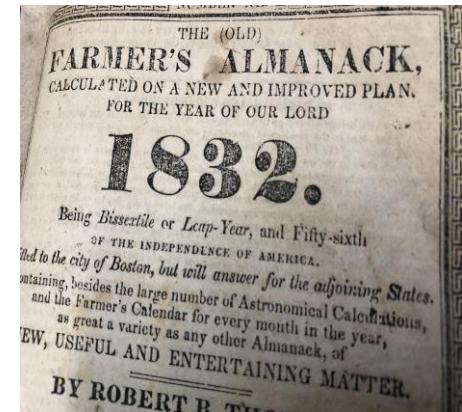
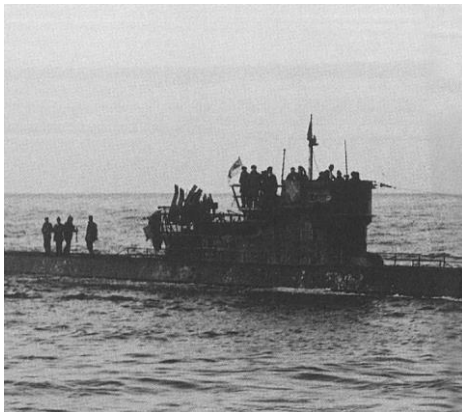
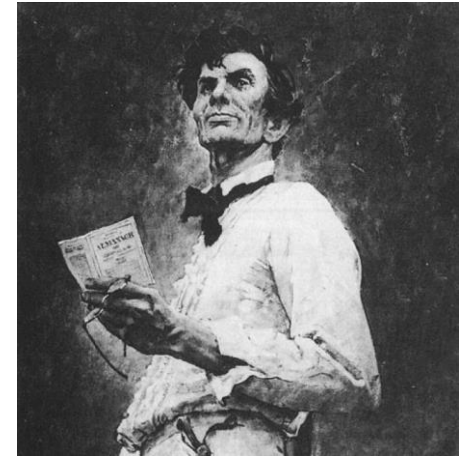
Summer 2020 Month by Month



- *Summer*: hotter, rainier
- *Fall*: warmer, near-normal precip

Almanac Tales & Trivia

- Abraham Lincoln and the Murderer
- The German Spy Who Loved Us
- The “Old Farmer” and the Volcano



Best Wishes to
Canada's Prairie Oat Growers
from Everyone at
The Old Farmer's Almanac!

- For more of *everything*, including Food, Gardening, Astronomy, Home Remedies, Humor, and much more:
Almanac.ca
- To email me about *anything*:
JackB@YankeePub.com
and . . .



Have a Wonderful Holiday Season!