

Alberta Plantwatch Spring Newsletter, April 2011

Welcome to our 24th year of tracking bloom dates in Alberta! Spring has arrived at last, after a long winter. Some areas saw more cold and snow than usual, thanks to a La Niña event (cooling in the Pacific Ocean), but this event should be over by June. The moisture should invigorate trees and help restore dry wetlands in central Alberta.

WEATHER IN 2010

On a global basis, 2010 tied 2005 as the warmest year on record. Environment Canada's climate trends at (<http://www.ec.gc.ca/adsc-mds/default.asp?lang=En&n=4A21B114-1>) say that the winter of 2009-2010 was Canada's warmest in 63 years of observations, at 4C° above normal. The greatest evidence of warming was seen in northern Alberta, whereas the south had cooler to average temperatures. Last spring (March-May 2010) was also the warmest spring on record for Canada. Southern Alberta averaged 2C° above average, and the northern third of the province was 2.5 -5C° above normal. By the end of March, much of Alberta was very dry, but later in the season many areas received abundant rain. The summer was cooler than usual in the southern Alberta prairies, and average to warmer farther north.

EFFECTS ON PLANTS

The warming we've seen over more than a decade is driven by climate change, and has resulted in drought in much of Alberta. According to Dr. Ted Hogg of the Canadian Forest Service, this dryness, which began in 1989, has killed many poplars in Alberta's Central Parkland. Many of the aspen trees and even more of the balsam poplar trees in drier parts of Edmonton city parks have died in the last decade. From 2001 to 2010, the city of Edmonton removed 3000 to 6000 trees each year; 3-10 times more than usual. Have you lost poplar or birch trees in your part of Alberta?

In 2009, a hot September followed by frost in early October, caused leaves to remain on many trees well into the winter. Despite this, many observers found that their trees and shrubs did well in 2010, thanks to summer moisture.



Bee gathering aspen pollen, by Loney Dickson

OBSERVER COMMENTS FROM 2010

NORTHERN ALBERTA

High Level. Leaves suddenly appeared on poplars April 21. This year, no caterpillars or bugs on poplars so leaves stayed lush and green. Beautiful fall colors by mid-September. Less rain this summer than farther south, and little hot weather. Early blue violets lasted weeks, dandelions were everywhere and spruce trees were laden with cones by fall. For the second year, willow leaves turned brown in early August, apparently because of a 'mite'. (W. Askin)

Manning. Much less rain this year. Aspen regenerated well. Good crop of raspberries and crabapples, but no berries on pin cherry or saskatoon. (R. Cowie)

Peace River. Low snow winter and dry spring; most snow melted by mid-March. May and June precipitation was near normal, but not enough to offset spring moisture deficit. (C. Stone)

Athabasca. Dry fall of 2009 and unusual spring (thawing in late Feb. and early March, then cold weather) affected spring bulbs which grew too early and then

suffered frost damage. My birch tree may have suffered from last year's drought. It was VERY LATE in leafing out compared with other trees. (A. Stiles)

Lac LaBiche. More rain this year; good growing season. Few pollinating insects again this year. (R. Creelman)

CENTRAL ALBERTA

Edmonton. Temperatures to April 5 were above average and precipitation below average. April 9-15 temperatures dropped, and new growth slowed to almost nothing. Then temperatures were above average for a week. Lilac leaves and blooms were smaller than usual. After good rain in early June, leaves got larger on lilac and aspen. Aspen started to shed seeds when lilac was in mid-bloom. (Welk, D.) Most garden perennials were much taller than usual. (J. Seidel). 2009-10 was an unusual winter, in that mountain ash berries were not eaten by flocks of Bohemian waxwings (the birds reappeared in 2010-11). Blue spruce produced clouds of pollen and abundant cones, to the delight of red squirrels. There was abundant fruit on mountain ash, high bush cranberry, apples and crabapples. With low water levels, the yellow flowers of marsh ragwort made bright halos around rural ponds. (E. Beaubien)

Bon Accord. Mid-April: the wetland near our farm is the driest I've ever seen it. May 29: snowing! The male hummingbird visiting our feeder disappeared with the snow, but returned June 1 with a female. (B. Collier)

Onoway. More flowers on chokecherry than usual. Very heavy fruit on pin cherry (a 1 in 10 year event, and I'm not into jelly making.) The cool, wet summer and fall produced early migration of geese and more brilliant colors in the understory than last year. (D. Downing)



Chokecherry by Alwynn Beaudoin

Devon. Twinflowers were abundant, as in 2009. The choke cherry was right on 450 GDD (growing degree days), my observed average. Aspen poplar and prairie crocus kept pace with one another, at approx. 100 GDD (long term average). (B. Janz)

Sherwood Park. I bet this year will be one of your most interesting ever! What a difference. We've had 10" of rain since the June 1, and that's only counting falls of 1/8" or more. Marvelous! Mosquitoes everywhere. Water in the slough; ducks, geese, and muskrats are back. Everything is lush and green. Even many of the trees look as if they may recover (won't know until next year). With early spring, chokecherry, saskatoons and apple trees in full bloom very early - no bees. Fruit very, very sparse so far (July 29). (L. McDonell)

Tofield area. Very scant first crocus blooms April 23, but burst of blooms May 2 after rains. (I. Crosland) Poplar blooms out all at once April 14-15 (C. Pattenden) Lilac flowers not as plentiful as last year (J. Ishida)

Leduc. Everything has grown huge this year and several plants we thought lost have sprouted again. I seem to have spent all summer cutting grass! (T. Abbott)

Wainwright. Strange year weather wise! Cool spring; wetter than usual summer in most of Alberta. Sept. looks like June, the plants are still green. First killing frost Sept. 17. A great growing season for most plants (P. Porter). Wonderful moisture in this area after years of drought. Wildflowers abundant (C. Snyder)

Camrose. Cooler weather contributed to later gardens, hay and crops. Very few days to wear shorts! The end of June and first week of July brought a bright array of wild roses, more and earlier than usual. Frost Sept. 16 at -9°C. (L. Woods)

Kelsey. Winter very mild, dry, windy, with little snow, lots of fog. Spring-summer: abundant chokecherry, Canada violet, three-flowered avens, silverweed, hawthorn, wild rose and fleabane blooms. Total rain from spring to Sept. 30 was over 20"! (M. Lambert)

Ponoka. Spring came very early; we spotted gophers and geese March 5. Season seemed to be either hot or cold. (M.A. Preddy)

Penhold. Crocus bloom started April 2, poplar April 7, but then cold stopped development until April 14. We have never seen so many yellow lady slippers! Another unfamiliar sight is marsh ragwort, which encircles almost every pond. (E. Ford)

Lacombe. Very poor garden, but grass grew tall and lush. Everything was late. (J. Meeres)

Bowden area. Leafing of wild and domestic trees was delayed, but there was heavy growth of grass and weeds. The first dandelions were small, but later there were many large plants. Ants and mosquitoes were abundant. June was wet and cold, but good growing weather. Trees and shrubs thrived, despite the winterkill. (S. Paton)

Caroline. Aspen poplars had very small leaves until after the April 29 snow; then 'opened up'. No 'bugs', so had leaves all summer. More Saskatoon bushes blooming than ever before (whole areas of our woods were white) but virtually no berries. Wet, cool summer, with few mosquitoes and fewer dragonflies. Lots of birds; more pine siskins, blue jays, magpies and crows or ravens than usual. Lots and lots of different mushrooms, but fewer shaggymanes than usual. Beautiful fall colors; brilliant yellows. (K. Edwards)



SOUTHERN ALBERTA

Carstairs. Very little snow. NO SPRING; NO SUMMER! The annual crops were late. In May-Aug, we would have one nice day and 2 or 3 wet ones. (Z. Kondra and M.J. Davies)

Cross Conservation Area (west of Calgary). Blooming in 2010 was 2 weeks later than average. (D. Choy)

Finnegan. (east of Drumheller). Crocus bloomed April 1. Just one to a plant. After it snowed on April 8, crocus bloomed with 6 flowers to a plant. Flowers abundant on golden bean, saskatoon and chokecherry. A wet, cool summer, but the wildflowers enjoyed it! (E. Gillespie)

Monarch. We had a number of trees that didn't drop their leaves in the fall. The trees didn't seem to be affected this spring and summer, except Nanking cherries which often don't bloom and have dead wood anyway. (M. Hafichuk)

Medicine Hat. Police Point Park was partly flooded on the June 18 weekend, which put a halt to observing certain flowers! (J. Stroh)

FOOTHILLS AND MOUNTAINS

Hinton. Warmer than usual mid-April, then cool until June 10. (H. Anderson) Lingonberry crop very poor in Switzer Park area. (E. Beaubien)

Fire tower west of Sundre. After the first week of April, we seemed to go back to winter and bypass most of spring; then a couple days of summer, then fall. My last spring snowfall (onto existing snow) was June 15. Bearberry flower buds had begun to form, and then snow came and covered everything for nearly a month. On July 29, snow was still lingering in crevasses and hollows in the mountains. (S. Kinzel)

Sundre. Gardens were good even though it was a cool summer. Summer temperatures arrived in October. It was nice to feel the heat. (A. Bakken) After a warm spell in April, leaves appeared on higher ridges in all

directions on April 22; then a cold spell and no more leaves for a week or more (some not until mid-May). We heard frogs again after a frog famine last year. Pastures did well with more rain. (M. Halvorson)

Kananaskis. Very long bloom season for prairie crocus, until mid-June. May was coldest on record since 1940. Incredible high numbers of wild strawberry, western wood lilies and Solomon's seal. (J. Buchanan-Mappin)

Crowsnest Pass. April 2: Thousands of crocuses in bloom in the upper Rock Creek drainage, but flowers small and the density of flowers was nowhere near that of peak years. (D. McIntyre)

Jasper East Gate: Compared to last year, berry crop on saskatoon was greatly reduced, and chokecherry and red osier dogwood were average. Buffaloberry was early: berry production in the valley bottom was good. Mosquitoes were thick throughout August. No insect infestations noted affecting plants. (E. Slatter)



Dandelion by Linda Kershaw

Spring Musings by E. Slatter

We are so fortunate in this pursuit
Of renewed growth
Of 'first blooms' and 'leaf outs'
That allow a sense of marvel at nature's capacity for
regeneration

Gladly we observe, with eyes open and senses keen,
Into the secret spaces
And well-known places
In search of spring's return, and signs of awakening

Eager for the changes –
They are as much in ourselves
As in the tender shoots of coltsfoot or showy willow catkins
That brave the late snows, persevere, then thrive!

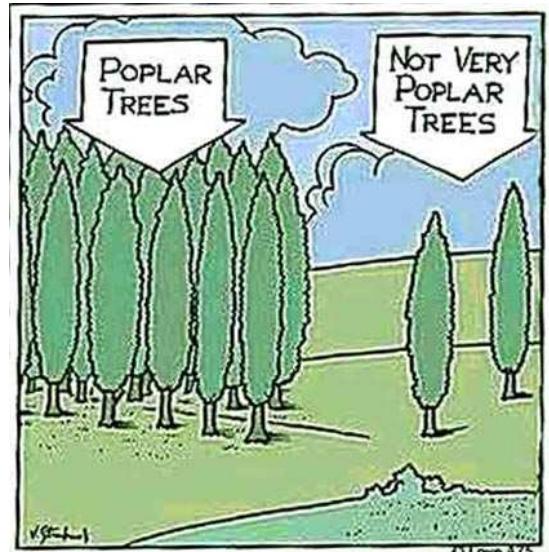
SASKATOON FRUIT

Cultivated plants from Edmonton to Red Deer produced some good fruit, but wild shrubs had only small dry berries. Alberta Plantwatchers in High Level, Manning, Sherwood Park, Tofield and Caroline reported little or no saskatoons, but in Leduc, observer T. Abbott reported abundant and huge saskatoons and chokecherries.

NEWS FROM PLANTWATCH

"Spring Flowering Response to Climate Change Between 1936 and 2006 in Alberta, Canada" by E. Beaubien and A. Hamann was accepted by the journal BioScience and should appear in the August issue. A second paper titled "Plant phenology networks of citizen scientists: recommendations from two decades of experience in Canada" was submitted and awaits review. Once published, these papers will be posted on the Alberta Plantwatch website www.plantwatch.fanweb.ca. Do visit this to see newsletters, data recording sheets, a wall chart with photos, and information on how to Plantwatch. You can report your data there and also on the federal Canada Plantwatch site www.plantwatch.ca.

You may enjoy the information in the updated Plantwatch teachers' guide. See page 90 for how to grow prairie crocus and saskatoon from seed, and how to care for your lilacs: http://www.naturewatch.ca/english/plantwatch/curriculum/full_curriculum.pdf



MANY THANKS to Nature Alberta for hosting our webpage. Thanks also to the University of Alberta's Department of Renewable Resources and especially to Dr. Andreas Hamann, for providing space and time for this program. Linda Kershaw kindly helped with edits and photos, Judy Huck helped with layout, and Environment Canada continues to coordinate NatureWatch.

Finally, a big round of applause for all the Alberta eyes of science, Plantwatch volunteers who observe and report plant bloom and leafing dates!

Have fun tracking spring flowers!

Elisabeth Beaubien
Alberta Plantwatch Coordinator
Science advisor: Canada Plantwatch
Department of Renewable Resources
751 General Services
University of Alberta
Edmonton, AB, Canada
T6G 2H1



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