# The Canadian Agriculture Weather Prognosticator

Volume X, Issue VIII http://www.worldweather.cc July 20, 2018

#### Ontario And Quebec

Wheat harvesting is under way and early indications suggest a good production year. Corn is beginning to reproduce and will fill into August while soybeans are just beginning to bloom. Summer production should be high.

#### WORLD WEATHER ISSUES

- U.S. Crop Weather Has Been Mostly Good, But Dryness Has Likely Reduced Production In The SW Corn Belt
- NW U.S. Plains And Pacific Northwest Have Been Hot, Dry Recently
- Northern Europe Dryness Has Reduced Small Grain Production
- Too Much Rain In Belarus, Western Russia And Parts Of Ukraine Are Threatening Small Grain Quality And Delaying Harvest Progress
- East-Central Australia Remains In A Very Serious Drought
- India Monsoon Has Performed Well So Far
- China Summer Crops Are Mostly Rated Well
- Brazil Safrinha Corn Harvest Just 25% Done, But Doing Well

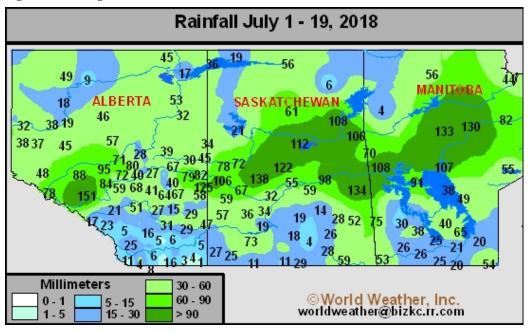
## **Drought Worsens In Southern Prairies**

The summer pattern has now settled in. Earlier this year we wrote about an opportunity for improved rainfall in the Prairies during a period of transition as we moved out of the spring and into the summer pattern. Beneficial rain fell during that period and many areas received enough rain to renew hope that the drought was going to break. However, our summer weather pattern is now beginning to lock into place and the situation has already led to worsening drought conditions in the southern Prairies. There will not be much opportunity for change again until we get to au-

tumn.

Rainfall in the first two-thirds of July was restricted in southern Alberta and in a part of southcentral and interior southeastern portions of Saskatchewan. Through July 16 some areas in southern Alberta were just a couple days short of being completely dry for the previous 30 days. Many other areas in the region received 1 to 16 millimeters since the beginning of this month with a pocket or two reporting upwards to 1.00 inch. All of far southern Alberta has failed to get enough rain this month to counter evaporation. The improved weather and soil conditions that were present in some areas during June are long gone and the trend is unlikely to change much for the next 30 to 45 days.

Actually, there is not much reason to anticipate a significant change in weather in any part of the Prairies through the month of August and that will not bode well for key crop areas in the southern Prairies that have already suffered vield losses. Totally dry weather is not expected, but the rain that does fall will have a tough time countering evaporation resulting in ongoing dryness.



#### Drought Worsens In Southern Prairies (from page 1)

The driest areas in the Prairies this month have been in southern Alberta, southwest into southcentral Saskatchewan and areas north from south-central areas into a part of central Saskatchewan. A large region surrounding Regina has

done poorly with rain this month and that is the same region that did poorly with late season rainfall last summer. The already low subsoil moisture will not provide much help to crops as they experience continued net drying conditions. The stress will likely further harm production potentials.

In addition to the miniscule rainfall in southern Alberta areas from Val Marie to Rockglen and northward to the Lucky Lake, Watrous and Wynyard areas have received 4 to 19 millimeters of rain so far this month through the writing of this report on July 20. Some of the dryness extended a little farther north, but rainfall was much better along and north of a line from Outlook to just south of Melfort.

However, the areas to the south have been fighting serious drought for more than one year and this year more notable production cuts are not going to be avoidable.

Already some have called the

only half over and weather patterns expected to stagnate through the next five to six weeks there is not much hope for recovery in the areas most seriously impacted with dryness. There is still potential for more northern areas to do better with

rainfall over the next few weeks maintaining a not so bad production outlook.

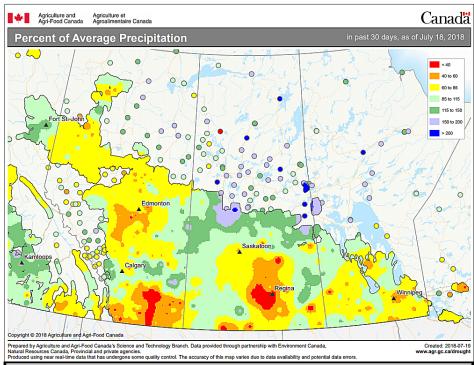
Not all of the Prairies have been dealing with dryness, obviouslv. Several locations in northern Saskatchewan and northern Manitoba have received abundant rain with flooding noted in the Hudson Bay area for a while earlier this month and in late June.

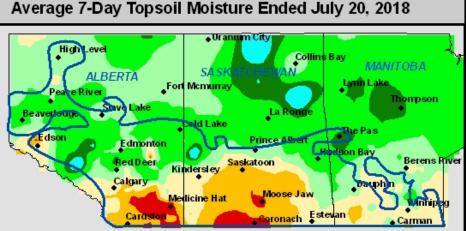
Another area of abundant rainfall has been in portions of western and northern Alberta and this region is expecting more rain of significance over the next few days and more later this month into August. The moisture surpluses in Alberta have not been as extreme as in past years because of warmer temperatures and better drying con-

ditions between rain events, but there are still some wet pockets out there challenging producers to get their spraying and other routine farm work done.

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Even though some areas did better with rainfall during the month so far that does not necessarily mean that dryness is not threatening those areas as well as regions to the south.

Extremely Wet

Wet

Moist

Adequate

Marginal

Limited

drought this year the most serious since 1988 and there are not too many in the drier areas noted above that will argue that point. With summer

### **August Weather May Mirror That Of July**

The latest outlook for August suggests more of the same for the Prairies. Worry is building over the intensity and persistence of drought. Some of our Trend Model research suggested the mean ridge of high pressure in North America might shift a little farther to the east than expected and if that occurs rain will be better in western and northern Saskatchewan.

However, lessons learned in the past suggest dominating features in July are quite often repeated in August. In addition to that fact, all three of our analog years from the 18-year cycle suggest a mean ridge position running from the southwestern U.S. Plains into southern Saskatchewan. This is the same position that we have been anticipating since our February forecast, but the atmospheric response is not likely to be quite as favorable as we had once determined. There will be short term bouts of rain in nearly all

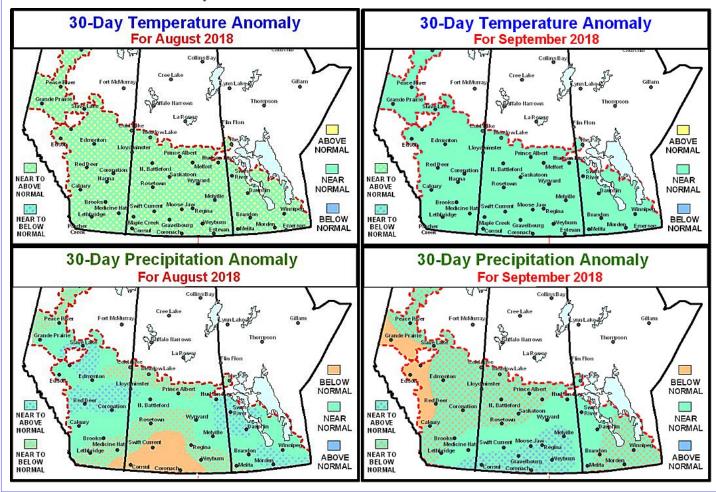
of the Prairies during August and the precipitation resulting will always be welcome, but with the mean ridge position expected as described above it will be difficult to get enough rain into the southern parts of Saskatchewan and some central areas to bolster soil moisture in a major way.

Rainfall in August is expected to be a little more beneficial in Manitoba and Alberta. Rain is expected to fall most frequently in western and northern Alberta—similar to that of recent summers, but warmer biased temperatures should help the region dry down when rain is not falling.

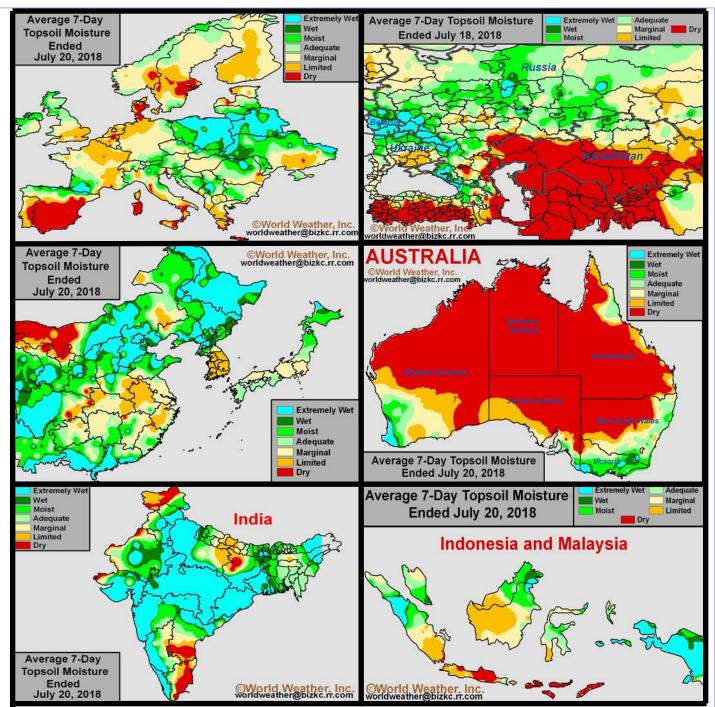
August weather is expected to vary enough that there will not be persistent hot weather. Temperatures will bounce around with some shots of cool air intermixing with the warmer bias to help put a cap on the potential for persistent hot weather. We will have our moments, however. The ridge of high pressure is not expected to be nearly as strong and dominating as that of 1988 or in the early 2000s, but we will still have to deal with some dryness in southcentral parts of the Prairies.

Early indications suggest less heat and little more rain may evolve in September. The change will be welcome and extremely important for placing more moisture back into the ground before winter arrives. The precipitation will make some harvesting a little challenging, but World Weather, Inc. does not anticipate weeks of rain. There will be sufficient time for field progress and drying times between rain events will be sufficient for normal early season harvest progress.

Welcome drying will begin in Alberta during September.



# Selected Weather Images From Around The World



Western Europe continues to suffer from persistent below average rainfall. Many areas in the North Sea region have reported below average spring and summer crop yields due to below average rainfall and warm weather prevailing since the summer season began. Relief is expected to come very slowly. Drought in the western CIS was relieved recently with needed rain falling in areas from Ukraine into the lower Volga River Basin. Russia's Southern Region has seen the greatest relief from dryness. In contrast, areas from Poland to western Russia and western Ukraine have been a little wetter than usual in recent weeks raising concern over small grain quality and inducing some harvest delays. Eastern Australia is another area enduring drought. Its recent rainfall has been minimal in Queensland and northern New South Wales where a reduction in wheat and canola planting has occurred. Dryness in Australia is not likely to abate anytime soon. India's soil moisture is looking very good while that of Indonesia and Malaysia slipped a little below average raising some concern for crops especially if El Nino evolves later this year as expected.

### SE Canada's Corn, Soybeans To Get Timely Rain

Many areas in Ontario and portions of southern Quebec have reported below to well below average rainfall in the past 30 days. The exception has been in parts of southwestern Ontario where amounts have been near to slightly above average. The lack of rain in recent weeks promoted net drying and some areas are becoming a little too dry. Some crop stress was noted in the driest fields, although production potentials remain generally favorable. Several atmospheric disturbances will bring timely rain to the region during the next two

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weeks that will help improve topsoil moisture, but more rain will be needed to sustain the improvement. Winter wheat maturation and harvesting has advanced relatively well so far this season, although some rain delay may come over the next couple of weeks.

After reporting near normal rain for May and June, Ontario and portions of southwestern Quebec have been drier than normal since the start of July. Rainfall as a percent of normal for the 30 days ending July

18 was less than 40% of normal in most locations from eastern and northern crop areas of Ontario into much of southern Quebec. Only areas in the southeast part of Quebec, near the U.S. border, reported better rainfall with amounts of 60-85% of normal. The greatest rainfall over the past 30 days has occurred in interior southwestern Ontario where amounts near and slightly above average were noted.

Topsoil moisture was rated marginally adequate to short in much of Ontario and short to very short near the Ontario/Quebec border. Most of southern Quebec had marginally adequate to slightly short topsoil mois-

ture. Most of the dryness in the topsoil was not critical for crops, but some analysts have noted a little stress to some of the crops in the region. Subsoil moisture was also rated marginally adequate to slightly short in Ontario and southwestern Quebec suggesting crop conditions might deteriorate more significantly soon if there is any prolonged period of dry and warm weather.

Corn and soybeans were planted and established under generally favorable conditions earlier this year. There was enough rain to keep soil Canada Percent of Average Precipitation

> moisture rated adequately without most areas becoming excessively wet for an extended period of time. Development advanced swiftly in most locations until dryness started earlier this month. Most areas initially had enough moisture to maintain aggressive growth until more recent days as the soil dried. No areas are critically dry, although timely rain will be needed in the next few weeks to reverse the drying trend.

In the meantime, winter wheat maturation and harvesting advanced swiftly in recent weeks once the drier weather bias evolved. Harvest progress is almost a week ahead compared to this time last year. Yields

and quality are expected to be favorable due to timely rain earlier this year and drier weather in more recent weeks.

A low-pressure center will slowly advance across eastern North America through early next week that will promote erratic rainfall on a frequent basis. Once the disturbance advances away from southeast Canada, another disturbance will bring scattered showers to the region toward the middle and latter part of next week. Rainfall through next Friday morning

> will range from 1.00 to 2.50 inches and locally greater amounts in southeastern crop areas of Quebec. Rainfall in the remainder of southeastern Canada will vary from 0.25 to 0.75 inch with local totals over 1.00 inch. The periodic precipitation pattern will carry-over into the July 28 through August 3 period, as well, although amounts will not be quite as great.

Rainfall during the next two weeks will be timely, but only a few areas will get enough rain to reverse the dry-

ing trend. Greater rain may be needed, especially in Ontario. Summer coarse grain and oilseed yield and quality prospects will be favorable across the region, but greater rain will still be needed in a few of the driest areas.

The increase in rainfall in Ontario and southern Quebec will slow or delay winter wheat maturation and harvesting. Some of the most significant delays are expected in Quebec where rainfall will be greatest. Minor quality reductions will be possible in the wetter biased locations. Most of the wheat crop will remain in very good condition and will continue to be harvested around the days of rain.

### Limited Dryness Relief In Germany, United Kingdom

Much of the North Sea region of Europe has experienced multiple weeks of below average precipitation and weather changes in this coming week are expected to only offer a limited amount of relief to the United Kingdom, northern Germany and Scandinavia. France has also been drying out, but it will be first to receive significant rain in the coming week with central and southern Germany next. Relief for both France and southern Germany seems inevitable, but areas farther north may have to

wait until late July and early August for enough rain to make a greater difference to the dry bias. In the meantime, portions of eastern Poland, western Ukraine, and Belarus are abundantly wet and likely to stay that way into next week raising concern over unharvested winter grain quality.

Soil moisture is rated short to very short in much of Germany, southern England, Wales, France and

southwestern Scandinavia due to the lack of rain in recent weeks. Germany and the United Kingdom have often had a shortage of moisture since the second part of June and crops have grown unevenly with poor yields expected. France received timely rain earlier in the growing season and most crops are still in good shape, despite recent drying in the topsoil. All of western and northern Europe needs rain, but that which is expected in the coming week may be limited for some areas.

Winter wheat harvesting in France is well underway and the harvest has likely advanced in Germany and the United Kingdom as well. The lack of rain in the past week promoted a good environment for late season maturation and aggressive harvesting in most locations.

Germany, the United Kingdom, and northern France will remain in a drier biased environment through the middle of next week. Brief periods of light rain will be possible, although warm weather and a lack of significant rain will promote net drying in many locations. Soil moisture reductions will continue and crop stress will prevail as well. There is potential for a shift in the weather pattern July 26 – August 1 that may promote more

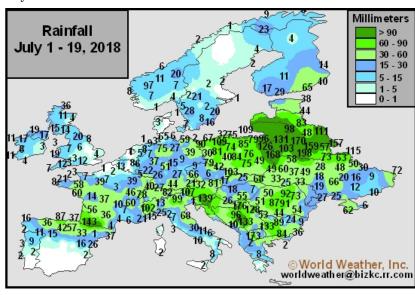
western Ukraine, and portions of Belarus are abundantly wet stemming from the recent rainfall. The precipitation was welcome for spring and summer crops that are reproducing and filling. The moisture was not quite so welcome in winter crop areas where delays in maturation and harvesting resulted.

A broad area of low pressure will promote erratic rainfall across Poland, Ukraine, and Belarus during the next few days with some follow-up

> rain expected over the weekend. Drier weather will then evolve for a while during the early to middle part of next week Moisture totals through next Wednesday morning will range from 0.40 to 1.50 inches with a few locally greater amounts. The erratic rain pattern will then return on a frequent basis July 26 – August 1. Winter crop harvesting will remain sluggish at times in the coming days for the wetter biased locations.

However, the lack of significant rain later this weekend and the first half of next week will help firm up the topsoil. Harvesting and general fieldwork will slowly improve for these areas later in the forecast period.

Portions of the Balkan region dried down in recent days due to the lack of abundant rainfall. Crop development advanced normally because of favorable subsoil moisture and several waves of precipitation are slated for the region during the next two weeks that will help return soil moisture to more adequate levels in most locations. A few pockets in Romania may become abundantly wet. Spring and summer crop growth will advance favorably while any late season winter crop harvesting that remains may advance slowly for a while.



significant rain for these areas, but confidence is low and a close monitoring of the situation is warranted. The boost in rain would help promote a better environment for late season crop development.

Central and southern France will see a mix of rain and sunshine during the coming week. Moisture totals through next Wednesday morning will range from 0.40 to 1.50 inches with local amounts over 2.00 inches. The precipitation will likely arrive in time to bolster soil moisture and support summer crops favorably, despite the need for additional rain. Late season winter wheat harvesting may be sluggish during the periods of more significant rain.

In the meantime, Eastern Poland,

### U.S. Midwest Crops Still Rated Mostly Well

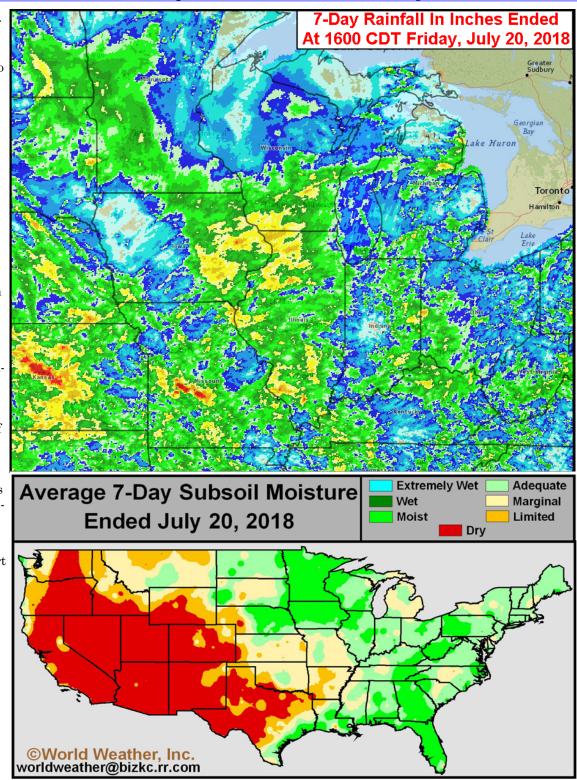
U.S. weather over the past week was sufficiently moist to provide some relief to dryness that was becoming significant in the southwestern Corn Belt, Michigan, Indiana and parts of Ohio.

Sufficient amounts of rain occurred to ease dryness, but not end it. Not shown here is topsoil moisture which remained short to very short in Michigan, Indiana and Ohio at the time of this writing. However, rain was expected over the weekend that will bring some relief to the region. Once that occurs a large part of the U.S. Midwest dryness will have been relieved and production potentials restored in many are-

Dryness earlier this summer has hurt corn yields in Missouri, western Illinois, Kansas and a few other areas, but good yielding crops from other areas in the U.S. crop areas will help to counter the production cuts from these areas.

Dryness in the southern Plains remains critical and production cuts in

Texas are expected in corn, sorghum, soybean, cotton, rice and other crops. The lack of rain has been one issue, but the heat has been another.



This past week generated daily high temperatures of 38 to 44 degrees Celsius from southern Kansas and southeastern Colorado into most of Texas. The heat stressed livestock and further reduced dryland crop production. Only partial relief is expected in the next two weeks. Less heat is expected with a few showers of light intensity are likely.