The Canadian Agriculture Weather Prognosticator

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Ontario And Quebec

Good soil moisture, timely rainfall and seasonably mild to warm temperatures have combined to support corn and soybean planting and establishment. The outlook remains favorable for these crops.

WORLD WEATHER ISSUES

- U.S. Midwest Corn And Soybean Crops Are Rated Favorably Except Missouri Where Conditions Are Declining
- Argentina Wheat Planting Advances Favorably
- Southern Brazil Rain Falls Too Late For Impact On Second Season Corn; Wheat Benefits
- North Africa Wheat Harvest Goes Well
- France, Northern Spain Plenty Wet While Northern Germany And Poland Are Dry
- East Ukraine To Kazakhstan Needs Rain
- Northern Russia Has Been Wet and Cool For Many Weeks
- India's Monsoon Taking A Break
- China Crop Weather Improving In North

Prairies Drought Not Over, But Eased

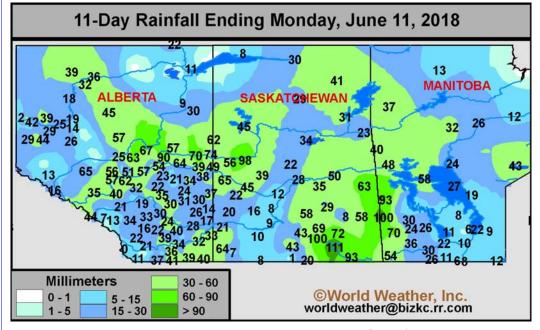
June's transitional weather that was advertised in late May has lived up to every bit of its expected relief and then some. Rainfall in the first 11 days of this month were certainly impressive in the east half to two-thirds of Saskatchewan and extreme western Manitoba

potential grain and oilseed production to parts of the region. Rain did not just occur in the eastern Prairies in late May and early June, but also impacted Alberta and far western Saskatchewan.

Some of the rain was welcome and some of it

crop country is now in its third year of abundant precipitation and some drier weather is desired, but just like in southern Saskatchewan in 2017...be careful what you wish for.

Not all of the Prairies received significant rainfall during the first part of



where 35 to 70 millimeters of moisture was common. Local totals of 70 to 111 millimeters were noted and there a few unofficial reports of much more.

The early June rainfall coupled with that resulting in Manitoba in the last week of May brought on a billion dollar recovery in

was not so welcome. Portions of Alberta were already adequately to abundantly wet in late May and the additional rain reported in early June may not be been welcome in some of the previously wettest areas in the north and some central crop areas where déjà vu was experienced. Some of Alberta

June. An ominous region of nearly missed precipitation has occurred from Saskatoon and Rosetown southward to Val Marie, Eastend and Rockglen. This region of dryness has experienced virtually no relief to the serious drought and the pressure is on in this region to get significant rain soon to

Prairies Drought Not Over, But Eased (from page 1)

protect production potentials.

No other area was missed so significantly by rain in the past 11

days, but complaints have been fielded from parts of interior eastern Alberta and interior southern Alberta recently about some dryness accumulatively for the season to date and there is need for more rain.

Most of the Prairies still have need for significant rain. Drought was certainly eased in this past couple of weeks, but drought has not ended. The latest soil assessment clearly shows a drier bias remaining in many Prairies' locations. The topsoil had already dried out once again in southern Alberta and, of course, the area of missed rain in Saskatchewan is still considered very short of moisture.

soggy mess. The areas with exceptionally wet conditions are relatively few in number.

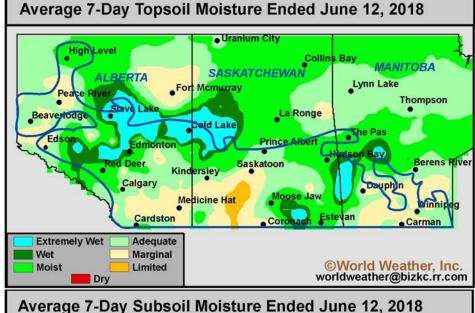
day morning. the storm system expected will perform similarly to that of the late weekend in which parts of southern Saskatchewan and parts of

southeastern and east-central Alberta failed to get significant rainfall. Light rain is possible, but no serious dryness easing moisture is anticipated.

Other areas in wester, central and northern Alberta and northern and eastern Saskatchewan, as well as Manitoba will get some timely rainfall of significance that will maintain adequate to abundant moisture for crop use into the final days of June.

Rain will still be needed in the drier biased areas after this next storm system passes and there will likely be some warm temperatures ahead and behind the storm system to perpetuate drying. The situation may lead to intensifying dryness

and that may raise more concern about the long term outlook this summer. As we noted at the beginning of the growing season this year, it would be and will be very difficult to fully restore soil moisture to normal given the weather patterns this year, but it is hoped that enough rain will fall from one storm to another to support crop development.





Many of the areas in eastern Saskatchewan have begun to dry down, although the imagery has shown here is perhaps suggesting the ground is drying out a little too quickly and a larger part of the east is still favorably to abundantly moist. Those areas reporting well over 90 millimeters still have some standing water and for those few locations reporting more than 150 millimeters the situation is still a

Southern Manitoba did not receive much rain during this latest storm system and that has allowed the topsoil to firm up across that part of the prairies similar to that of southern Alberta.

One more storm system is expected to move across the Prairies in this two week series of relief and that will occur late Wednesday night into Satur-

Weather Rest Of June To Be Mixed; Weaker Storms

Late May and early June's transitional weather noted in the May 17 and May 31 Prognosticators turned out to be more significant than expected, but the rain did come and relief arrived at just the right time to save many crops.

Changes in North America Weather in recent weeks has suggested the 18-year cycle will likely gain dominance against the solar cycle and the correlated first quarter La Nina abating years study we conducted earlier this year. The La Nina influence is disappearing fast as some changes in the equatorial Pacific Ocean adjust toward a possible El Nino bias in the fourth quarter this year. Warming of ocean temperatures is already under way in the tropical eastern Pacific Ocean and as we discussed previously the Gulf of Alaska ocean water has also warmed recently. These changes reduce the previous influence on

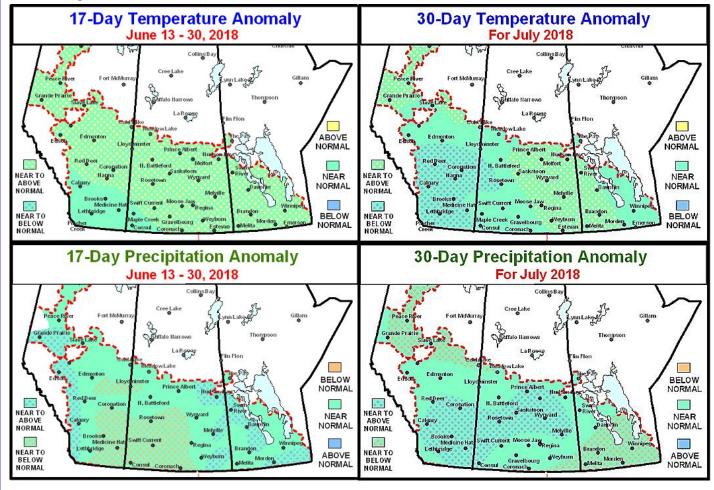
North America's summer ridge of high pressure that at one time looked as though it could be stronger than the 18-year cycle data suggested. This prospect seems to be waning and the odds are rising for more timely rainfall during the summer for many areas in the Prairies. World Weather, Inc. is not convinced that enough rain will fall to fully restore subsoil moisture to normal, but timely rain events should occur support crops better than many had been anticipated earlier this year.

The balance of June will generate near to above average temperatures in much of the Prairies with a few bouts of short term coolness in the southwest. Precipitation will be near to below average from eastern Alberta into central and southwestern Saskatchewan while near to above average farther to the east and along the front range

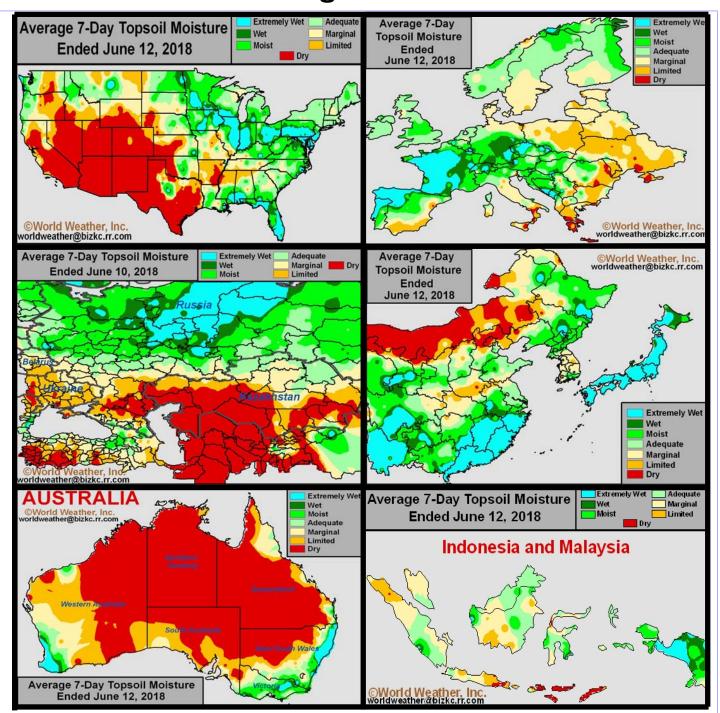
of the Alberta mountains.

July weather may have a few more bouts of cooler biased temperatures in the western Prairies and in particular the southwest while Manitoba and southeastern Saskatchewan have some warmer tendencies at times.

July rainfall is expected to be timely and beneficial across much of Alberta and central, western and northern Saskatchewan. No area will be critically dry, but a little drier bias is expected in portions of Manitoba and extreme southeastern Saskatchewan. Most of the anomalies in July will not deviate very far from normal and the combined temperature and precipitation bias should prove supportive of many summer crops. Pockets of dryness will remain and a few areas of heavy rain and severe storms are possible, as well.



Selected Weather Images From Around The World



Dryness expanded over the past couple of weeks in eastern Europe; including Ukraine, Belarus, Poland and northernmost Germany. Southeastern Romania and eastern Bulgaria were also quite dry. Some partial relief was expected in eastern Europe over the coming week, but more rain will be needed. Dryness also extends from eastern Ukraine through Russia's Southern Region to Kazakhstan where topsoil moisture is short to very short and subsoil moisture is only slightly better These areas from eastern Ukraine to Kazakhstan are not expecting meaningful relief in the next couple of weeks. Dryness in parts of northern China was eased during the past week. Additional relief will occur in Northeast China during the coming week to ten days while the Yellow River Basin and areas southward to east-central China experience expanding dryness. Some rain has evolved in Western Australia recently, but much more is needed and "some" will occur early next week. Queensland and northern New South Wales, Australia drought remains serious. U.S. Midwest dryness was eased recently improving crops from Iowa and southern Minnesota to Ohio.

India Monsoon To Take A Break After Good Start

Monsoonal rainfall began this month quite favorably with many interior southern and some central crop areas reporting above average rainfall in the first 11 days of June. However, a trend change is under way that will squelch rainfall across the nation during the coming ten days and perhaps a little longer. The moisture reported so far this season

should be sufficient to start planting, but with warm temperatures and restricted rainfall over the next ten days it will not take long for the situation to turn around and worry will begin rising over long term moisture.

Temperatures were again warm to hot across the country during the past week. Daytime highs warmed to a range of 90 to 110 degrees Fahrenheit with pockets in the south, east, and north only warming to the upper 70s and 80s. A few locations in Rajasthan warmed to 115 degrees or slightly higher.

Several areas from northern Tamil Nadu and southern Andhra Pradesh through Karnataka and Maharashtra have been wetter than normal so far this month. These areas reported 107-345% of normal rainfall June 1-11 with portions of Karnataka receiving over five times' normal precipitation. Portions of central and

northern Uttar Pradesh into neighboring areas of northern Madhya Pradesh also received 118-224% of normal rainfall . Most other production areas received below average rainfall with portions of Gujarat, Rajasthan, Odisha, northeast Andhra Pradesh, eastern Uttar Pradesh, and Bihar reporting less than 25% of normal precipitation.

Kerala, Karnataka, Maharashtra,

and immediate neighboring areas generally have adequate to abundant soil moisture stemming from the recent rain. Several other pockets from southern and central India have adequate moisture as well. Bangladesh and the Eastern States are generally abundantly wet outside a few areas further inland. The moisture profile is otherwise marginally adequate to

0- 25% 25-50% 50-75% 75-100% India 100-150% 200-300% 300-400% > 400% Percent of Normal Rainfall For OWorld Weather, Inc. worldweather@bizkc.rr.com June 1 - 11, 2018 Extremely Wet Wet Adequate India Marginal Limited Average 7-Day **Topsoil Moisture** Ended June 11, 2018

very short in the remaining production areas. There is still plenty of time for monsoonal rain in the next few weeks to promote a better environment for establishment and growth, but the forecast is downplaying rainfall for at least the next ten days and that will lead to net drying.

Monsoonal rain will be spotty in much of southern, central, and eastern India this week. Several areas from eastern Maharashtra, western Madhya Pradesh, and immediate neighboring locations through West Bengal and Bihar will receive 0.50 to 4.00 inches of rain with local amounts of 6.00 inches or more by next Monday morning. However, many areas will only receive a trace to 0.50 inch of rain resulting in significant drying and growing need for rain, especially with the outlook possibly staying dri-

er than usual into late month. Coastal locations of Kerala, Karnataka, and Maharashtra will otherwise receive 6.00 to 12.00 inches of rain and locally greater amounts by early next week.

Many areas in central and southern India will not receive enough rain to significantly improve the moisture profile this week. Planting will advance while soil moisture is plentiful, but field progress, germination and emergence will be slowed as the ground firms additionally during the next ten days. Temperatures during this period will heat up so that daily highs in the 90s and slightly over 100 degrees Fahrenheit will accelerate drying rates and quickly reverse the beneficial moistening that has occurred in the first 11 days of this month. Planting will advance swiftly in the wetter areas until the soil dries down too much. Aggressive fieldwork should occur from

parts of Madhya Pradesh and especially portions of Maharashtra into Karnataka and parts of Andhra Pradesh where the greatest rainfall has occurred so far this month.

Much of Gujarat and Rajasthan will receive little to no rain during the next two weeks. Any rain that does fall will be rapidly lost to evaporation. Planting is not expected to progress significantly until rain falls.

Serious Drought in Eastern Australia

Kansas City, June 12 (World Weather Inc.) – Queensland and northern New South Wales have been drier biased for the past few months.

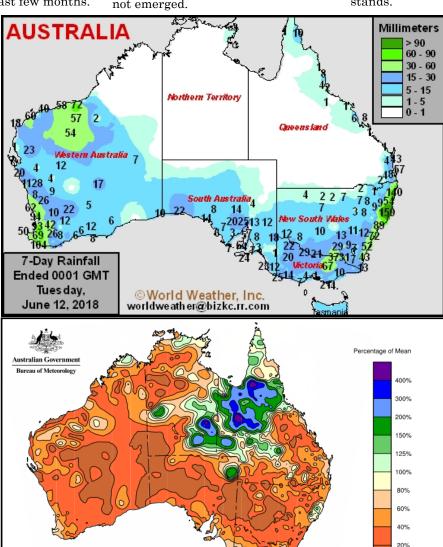
The ground is critically dry and most areas are dealing with a very serious drought. Abundant rain will be needed to fix the moisture deficits and promote a better environment for the winter wheat, barley, and canola produced in these areas. However, very little rain is expected during the next two weeks. The ground will continue extremely dry and crop prospects are poor. In the meantime, winter crop planting and establishment conditions have improved in Western Australia and remain very good in Victoria and immediate neighbor-

Northern New South Wales and much of Queensland reported little rain of significance since the beginning of April. Only periods of light rain were noted during this time and much of the precipitation

ing areas.

was lost to evaporation relatively quickly after its occurrence. More significant rain was reported in March, but pockets in north-central New South Wales have not received significant rain since January. Drought has been ongoing for several months and abundant rainfall will be needed to reverse the moisture deficits. Winter wheat, barley, and canola planting has not occurred in the driest areas

and for those fields that were planted germination and emergence has been uneven and erratic with most crops not emerged. favorably near the coast, but interior crop areas need greater rain to ensure a well-established crop with good stands.



In the meantime, Western Australia reported some much-needed rain recently easing some of the state's dryness, but much more rain is still needed to support long term crop development. Rainfall during the most recent seven-day period ending this morning ranged from 0.50 to 2.50 inches with local amounts of 4.00 inches or slightly more for pockets near the coast. Soil moisture is rated

Australia Rainfall percentage:

1 March to 31 May 2018

Victoria. southern New South Wales, and South Australia received light to moderate rainfall during the past week maintaining the best soil moisture relative to the entire nation. Winter crop planting and establishment has likely been quite successful so far this year. Moisture totals in the past week ranged from 0.32 to 1.50 inches with locally greater amounts in Victoria. Winter crop conditions in southeastern Australia are generally favorable with the only area of concern in South Australia and extreme western Victoria. where soil moisture remains short.

The main production areas in Queensland and northern New South Wales will remain in a mostly dry mode during the next two weeks. Any rain that falls will be too light

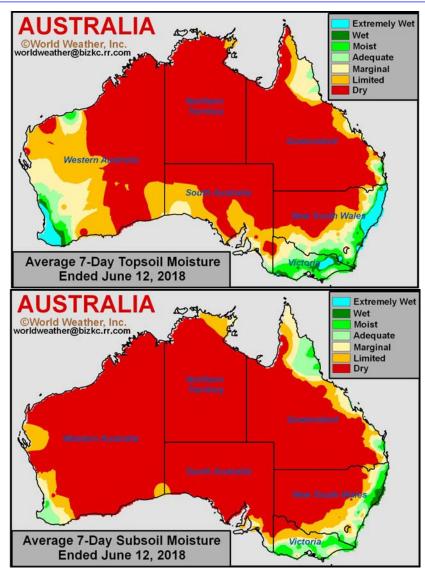
and infrequent to counter evaporation resulting in ongoing drought conditions. Planting progress will remain on hold for many of the driest areas and previously planted crops will struggle to establish normally without a general rain.

Western Australia will see a period of rain Sunday into Monday with follow-up precipitation possible later next week. Very little rain is expected

Serious Drought in Eastern Australia (continued from page 6)

through the first part of the weekend. Moisture totals through next Tuesday morning will range from 0.25 to 1.00 inch with local amounts of 2.00 inches or more near the coast. Periods of light rain will also be possible June 20 - 26. Winter crop conditions will be favorable in many locations during the next two weeks. However, some drying is expected between rain events. Sufficient rain will occur between the drier biased periods to leave soil moisture about the same as it is today. Southwestern areas will remain wettest and will have the best winter crop establishment. A boost in rainfall will still be needed in eastern and northern portions of the winter crop production region where today's soil moisture is

Victoria and neighboring areas in southern New South Wales and South Australia will see a mix of light precipitation and sunshine during the next two weeks. Moisture totals through next Tuesday morning will range from a trace to 1.00 inch most often with several areas in eastern and southern Victoria receiving 2.00 inches or more of rain. Winter crop prospects will remain favorable for much of Victoria. South Australia and southern New South Wales.



SE Asia, India And Australia Drying Worrisome

Under normal circumstances net drying in India eastern Australia, Indonesia and Malaysia would not be of much concern, but it is a little puzzling to be so dry in the current environment that should be promoting rainfall.

The greatest worry about the situation comes as we look ahead into the third and fourth quarters of this year. Some surface ocean temperature warming is occurring in the tropical eastern Pacific Ocean and this trend will likely continue for a

while.

The warming is a little ominous because of the potential for El Nino development later this year. El Nino conditions will squelch rainfall in each of these Asian and Australian areas and that only leaves a few months for improved rainfall.

El Nino events usually occur near and immediately following the solar minimum and we are expected to be in a solar minimum late this year and especially in 2019. No solar minimum has occurred since 1950 without an El Nino event occurring and this event is not likely to be very different.

Eastern Australia's drought is already serious and the having an El Nino event evolving in the spring and summer of 2018-19 after this year's already extremely dry conditions could have devastating impacts.

India's Monsoon is expected to perform poorly for the next two weeks and then improve and some greater rain should impact Indonesia eventually, as well.