



I.D.E.A. Industry Update - March 1, 2002

I.D.E.A. Regional Meetings

The I.D.E.A. Regional Meeting for Alberta Dealers will take place Tuesday, March 12, 2002, 9:30 a.m. to 4:00 p.m. at the Red Deer Lodge Hotel and Conference Centre, Red Deer, Alberta (4311 - 49th Avenue, Tel: 403.346.8841). The I.D.E.A. Regional Meeting for Saskatchewan and Manitoba Dealers will take place Thursday March 21, 2002, 9:30 a.m. to 4:00 p.m. at the Ramada Hotel and Golf Dome, Saskatoon, Saskatchewan (806 Idylwyld Drive N, Tel: 306.665.6500). Regional meetings are free of charge to I.D.E.A. members and sponsors. Watch for detailed agenda information to follow.

Drought on Drought is Unlikely, by Tim Ball (Country Guide, February 2002)

What are the chances of a second dry year in parts of the country, especially in the prairies? The short answer will please farmers: relatively low. Old wisdom says drought years don't happen back to back. That's not true, but such events are rare. And the summer of 2001 was an anomaly, coming as it did in a wetter period outside the regular drought cycle.

Summer 2001 had much in common with 1961: a single dry year in a wet period. In 2001, fortunately, some areas had timely rains. As well, temperatures and winds were not excessive. Still, many crops suffered.

Drought cycles are well documented in long-term records such as tree rings, Hudson's Bay Company journals, and average protein levels in prairie wheat over the past 100 years. These records show a 22-year cycle correlated with sunspot activity. The droughts tend to alternate between "cold droughts" with low precipitation and temperature, as in the 1910s and 1950s, and "hot droughts" when precipitation is low and temperature high, as in the 1930s and 1980s.

Average time between droughts, hot and cold, is 17 years. The 1980s drought ended around 1990 (it varied regionally) so the next general drought, a cold one, should begin around 2007.

But what happened in 2001? Climatologists refer to events well outside the normal long-term average as singularities. They can be single day, or a whole season. Canadians know about brief warm spells in winter, even though the sun is low in the southern sky and its rays weak. Cold spells likewise occur in mid-summer. The challenge is to explain why.

Singularities occur everywhere, but most frequently in the middle latitudes between 35E and 65E N and S. Tropical and polar weather is monotonously regular. Unusually high or low temperatures occur when tropical or polar air migrates deep into the middle latitudes. Similarly, unusual wet and dry periods occur when moist or dry air penetrates our region.

Movement of large masses of air in the middle latitudes is controlled by the circumpolar vortex

(commonly called the jet stream). These air masses have the characteristics of their place of origin. For example, an air mass that moves south from the frozen Arctic winter will be exceptionally cold and dry., Warm moist air originating in the Gulf of Mexico and moving north in summer will, on the other hand, bring thunderstorms and occasional tornadoes to southern Canada.

We now know air movement is controlled by waves in the jet stream. These waves vary in north/south amplitude. Low amplitude means low variation and few singularities. More singularities occur with high amplitude which encourage cold air to move well south or warm air well north.

We know wave amplitude in the jet stream tends to be predominantly low or high for long periods. Amplitude was generally low from 1940 to 1980, but high from 1980 to present – a shift that partly explains concern about climate change of recent years as singularities increased.

Why these waves vary in amplitude is not know, although pattern changes correlate with changes in solar activity. Normally the waves migrate from west to east, changing general weather patterns on a 4- to 6-week basis. But when wave amplitude is high, blocking occurs. That is, the waves stall and a region receives similar weather fro 8 to 12 weeks.

That's what happened in the summer of 2001. Cool (for the season), dry air covered western Canada extending well into the U.S. Los Angeles had its coolest June in more than 20 years. Dry conditions extended from Victoria on the west coast to Regina. East through Winnipeg to the Great Lakes the early summer was wet, but dry again to the Atlantic provinces.

Many point to El Nino and La Nina events (periodic extensive warming and cooling of the eastern tropical Pacific Ocean) as contributory causes of wet and dry periods. In Canada, La Nina is associated with an increased probability of dry weather, and El Nino with wet weather. La Nina conditions did exist in 2001, which was dry. But we're due to shift from La Nina to El Nino is 2002, which means a wetter trend for North America.

It's a complex picture. And solar cycles, jet stream waves and El Nino/La Nina are just some of the influences on our weather patterns. Moisture suppliers through the growing season will depend on the complex interplay between these factors. This is cool comfort for drought sufferers.

Greater comfort comes from the major indicators which are against another drought singularity. Solar activity is declining – the current 11-year cycle began in 1995 and peaked in 2000. Correspondingly, jet stream wave amplitude will diminish. La Nina is shifting to El Nino with suggests wetter conditions in western North America. And we're 5 years away from the next 22-year drought – a cold one going b y the pattern observable in long-term records.

February Pool Return Outlook

The CWB has released the February Pool Return Outlook (PRO) for the 2001-02 crop year. Wheat values vary from unchanged to \$2 per tonne higher compared to last month's outlook while durum values are \$5 per tonne lower. Designated barley values are unchanged for six-row and down \$1 per tonne for two-row. The feed barley PRO is unchanged. The CWB's first PRO for the 2002-03 crop year was released on February 25. More information is available online at <http://www.cwb.ca/payments/pro/2001-02/022802.shtml>.