

Tales of the unusual

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Something a bit different this month. One part serious - a look at some of the recent changes in weather monitoring technology; and a bit of frivolity - how much truth is there to the observation that it only rains on the weekend!

Many of our weekend recreational pursuits are weather dependent. I thought some of my friends might be getting a bit paranoid this summer when they said they thought that rain clouds had formed most Friday evenings, and then cleared out most Monday mornings. As a scientist I could not let these paranoid delusions go untested!

HortPlus' network of recording weather stations throughout New Zealand gives us a convenient way of checking if there is any truth to the rainy weekend theory. HortPlus MetWatch was used to summarise the hourly rainfall information for the period 1 November to 15 March to give daily rainfall totals. These were then exported from MetWatch to Excel and each day categorised by day of the week and the number of rain days and rainfall totals calculated for each day of the week. I have to admit that I was a bit surprised by the results!

Figure 1 shows the truth of the summer, and it is very much area-dependent. If you lived in areas like Northland you could indeed be forgiven for thinking that a cloud was following you around on the weekends. Gisborne-ites must have felt like Nature was playing with them as dry Fridays and Mondays straddled wet weekends. However, if you lived in Central Otago, you would have been right if you thought the weather gods had been kind to you this year as weekends accounted for the days when the lowest proportion of rain fell! In fact, continuing this rather strange analysis to its conclusion... Figure 2 shows the proportion of total rainfall between November and mid-March occurring on weekends vs weekdays. There is a definite trend this past summer of rainfall on weekends increasing as you move from South to North. Odd, to say the least!

On a more serious note, I did promise you some information on technologies for monitoring weather information. We will set the scene this month, and next month get into the detail.

Weather observations are fundamental to weather forecasting, and so there is a strong tradition throughout the world of observation networks. These networks were based on volunteers and paid individuals who every day at 9am made a series of standard observations and measurements. The results from these observational networks played a large role in feeding the weather forecasting methods of the day, and became increasingly important to decisions made in a range of industries including agriculture. As the uses to which this weather data became increasingly sophisticated, so grew the need for methods to increase the frequency with which measurements were made, and to reduce the costs of acquiring these observations. Enter automation! Over the past two decades automated weather stations have become the norm, and over the past 10 years these new technologies have become increasingly popular for more localised applications. Next month we will look at some of the

instrumentation available, and some of the advances being made in the management and communication of that information.

Figure 1. Percentage of total summer rainfall (1 November - 15 March) falling on a specific day of the week.

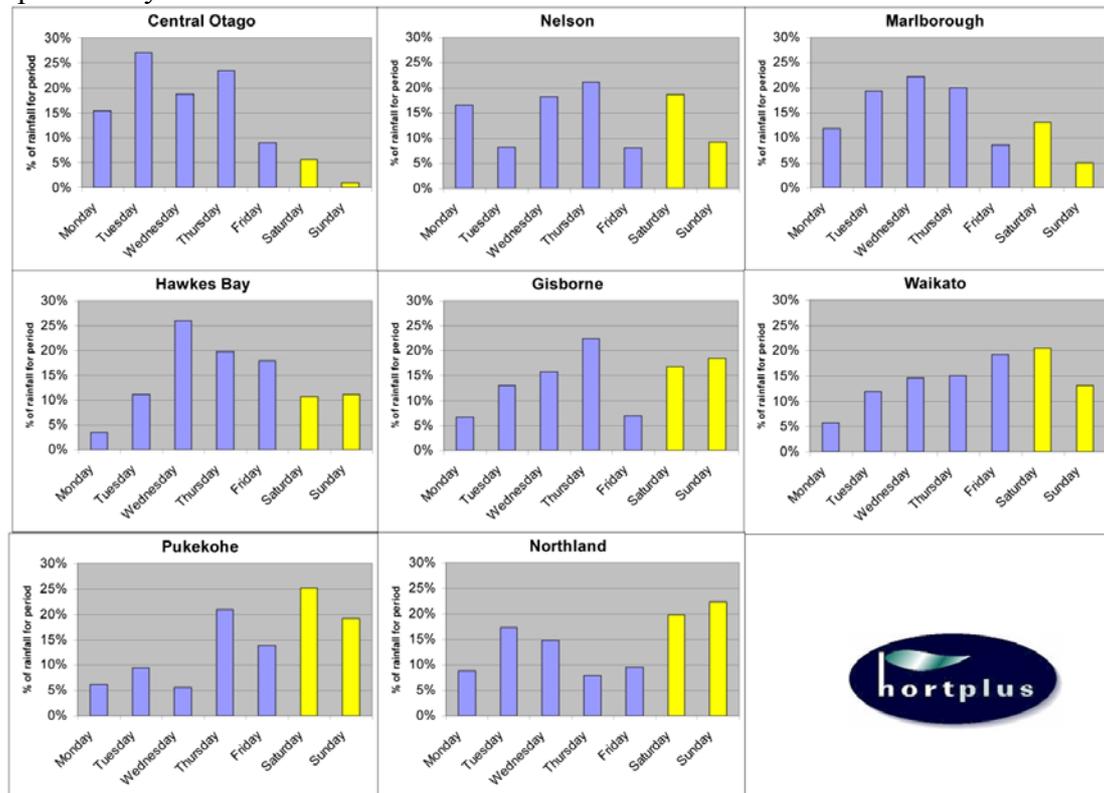


Figure 2. Percentage of total summer rainfall (1 November - 15 March) falling on a weekend vs weekday.

