Queensland fruit fly season outlook

September – November 2021

Overview

Weather conditions during the unusually prolonged autumn of 2021 favoured the expansion of Queensland fruit fly (Qfly) numbers in the Greater Sunraysia Pest Free Area (GSPFA). The beneficial effect on fruit quality and volume and the associated fruit fly activity combined to produce conditions perfect for Qfly. Rainfall and temperatures during much of winter in the GSPFA were also higher than average and therefore enhanced the survival of larger than normal numbers of Qfly.

More unusually moderate weather patterns are forecast for September to November this year. This means that greater numbers of overwintering flies will be able to leave their winter refuges and survive long enough to find fruit to infest. Unless adequate area-wide management strategies are maintained and improved, and Qfly-suitable weather conditions remain, it is likely that 2021/22 will be another bad fruit fly year.

Current situation

In the GSPFA in 2021, autumn was longer than usual, with higher maximum and minimum temperatures and more rainfall than average. This facilitated both fruit production and associated fruit fly infestation leading up to winter. The high numbers leading into winter and the overall mild conditions over winter are likely to result in significant Qfly pressure in spring.

The region recorded a warm winter with an increase in rain. There were only a few nights below 0˚C. Qfly overwinter as adult flies and these mild conditions are unlikely to have supressed the numbers much. The extra rainfall will also help these adults survive in greater numbers by supplying needed moisture.

There was a jump in Qfly numbers trapped in the GSPFA in early August 2021, reflecting the warming conditions. The rise in trapped Qfly was not evenly spread across the GSPFA. Areas in the northern section of the GSPFA (for example, around Coomealla, Irymple, Merbein, Cardross, Red Cliffs, Mildura and Gol Gol) showed more marked increases than the southern regions. As the north-western area of the GSPFA tends to warm up earlier, it is expected there would be more Qfly activity early in the season.

Outlook

The weather outlook for the next three months shows little change in maximum temperatures (only 30–40% chance of exceeding the average) but there is a very high chance that minimum temperatures will be higher than average (>80%) (see Figure 1) as well as very high chances of higher rainfall than average (>80%) (see Figure 2). These conditions are suitable for another bad fruit fly season – at least for the spring of 2021.

The Qfly spring peak generally occurs in the GSPFA in August and September each year. Flies captured during the spring peak are mostly those that emerged as adults in late autumn and survived winter in warm refuges. The spring peak is very important as it is the precursor to the rest of the season.

The following figures (1 and 2) were extracted from the Bureau of Meteorology website (www.bom.gov.au/climate/outlooks/#/overview/summary) on 25 August 2021.

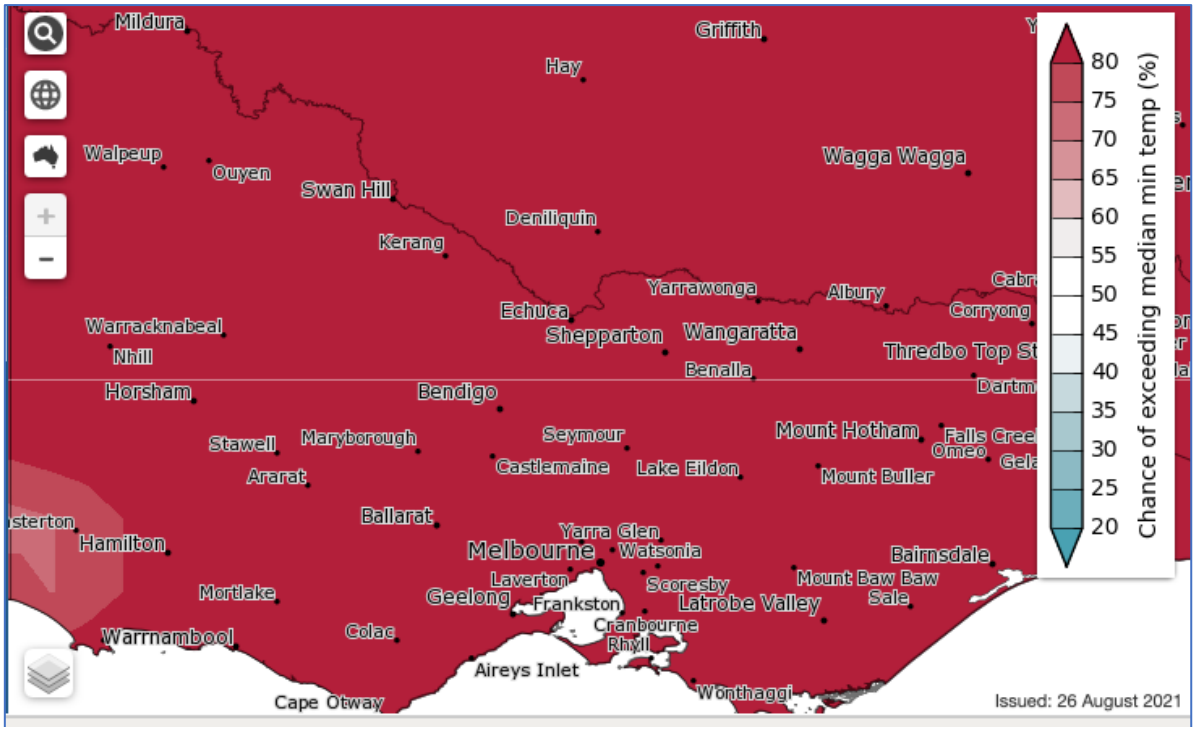

Figure 1: Forecast for Sept–Nov 2021 – chances of exceeding average minimum temperature of 9°–12°C.

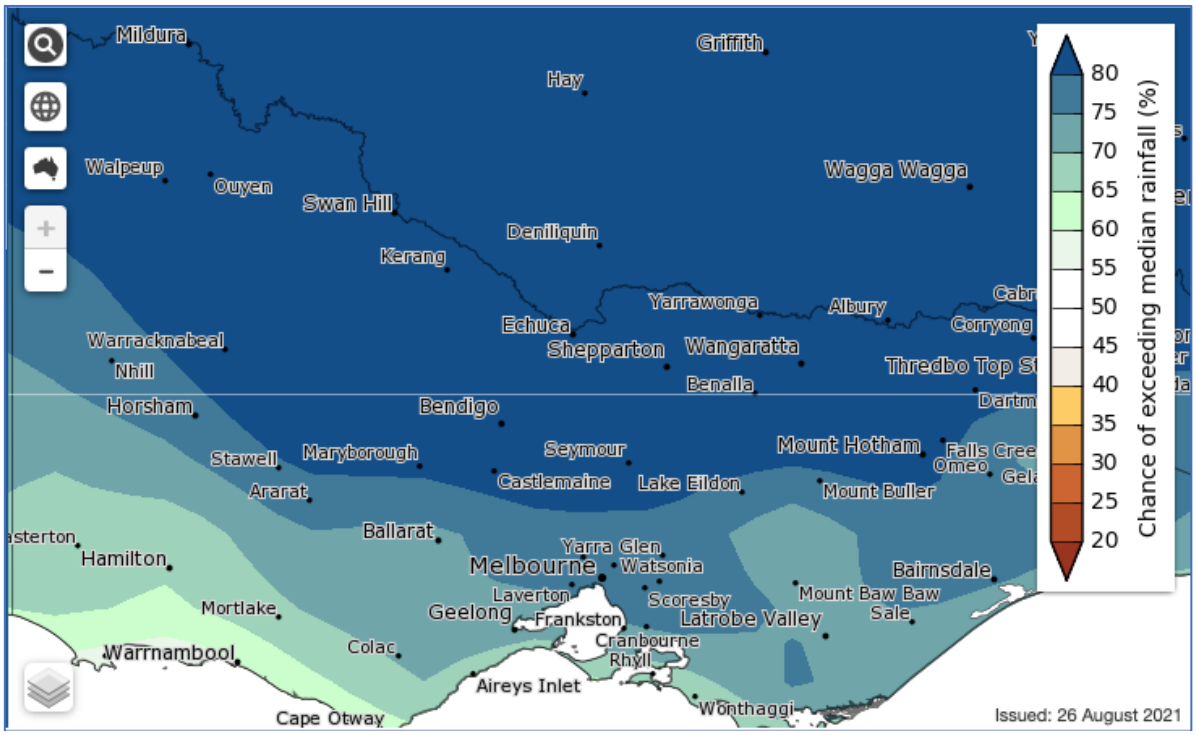

Figure 2: Forecast for Sept–Nov 2021 – chances of exceeding average maximum rainfall of 50–100mm.

This information was compiled by Andrew Jessup of Janren Consulting for the September 2021 Greater Sunraysia Pest Free Area grower newsletter.