Expect the unexpected

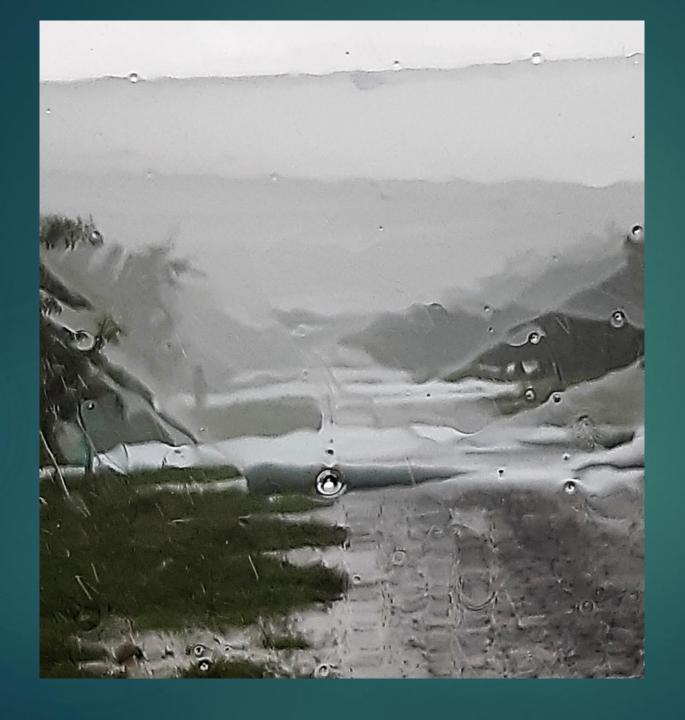


Feb 20th, 2018: Cyclone Gita

Over 500mm in February (2 cyclones)



Same Envy block June 2023



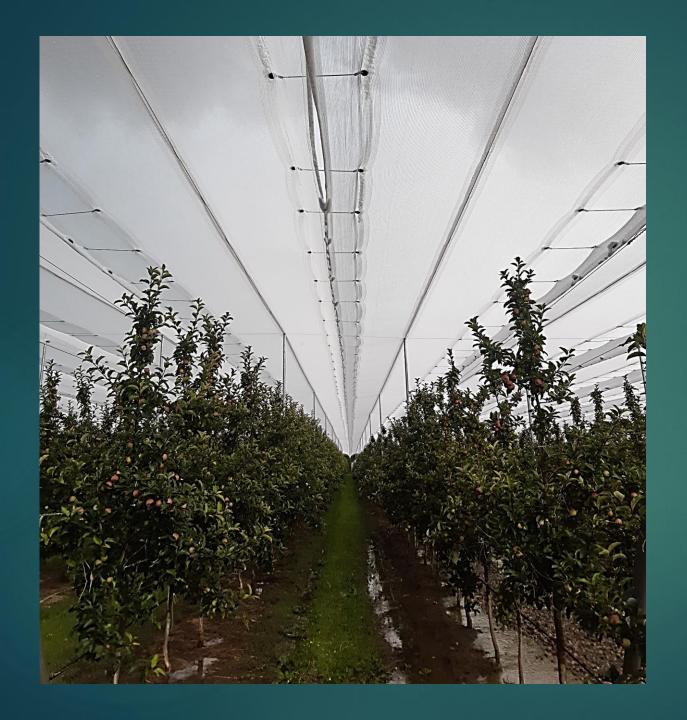
Boxing Day Hailstorm 2020

Over 1000 ha's of apples & pears badly damaged

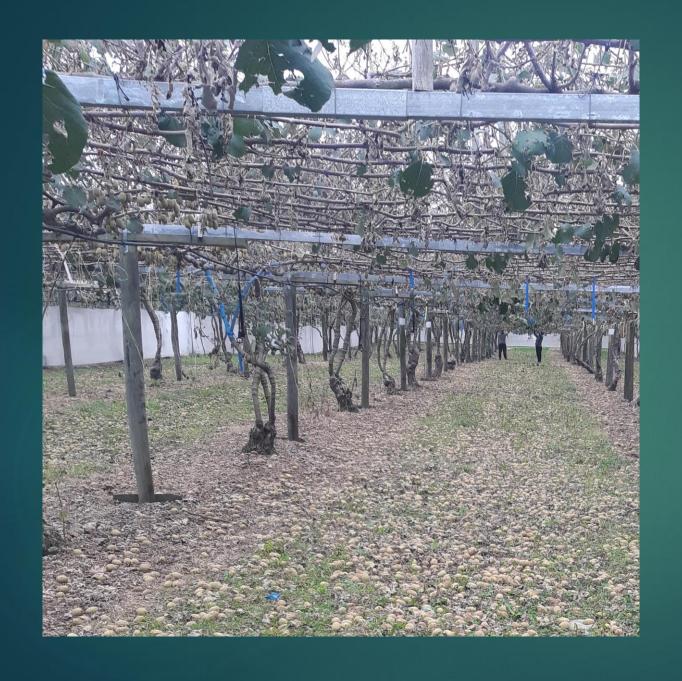
Flat top hail structure



Crop protected but at a cost



V-trellis hail structure



2.2m trays of Gold kiwifruit lost in Motueka

Zespri Hail Policy
Pay 75% of OGR (\$8.50)
Actual payout: \$3.00 TE

New policy: Actual orchard costs + 50% = \$6.76



Other versions of trellis release

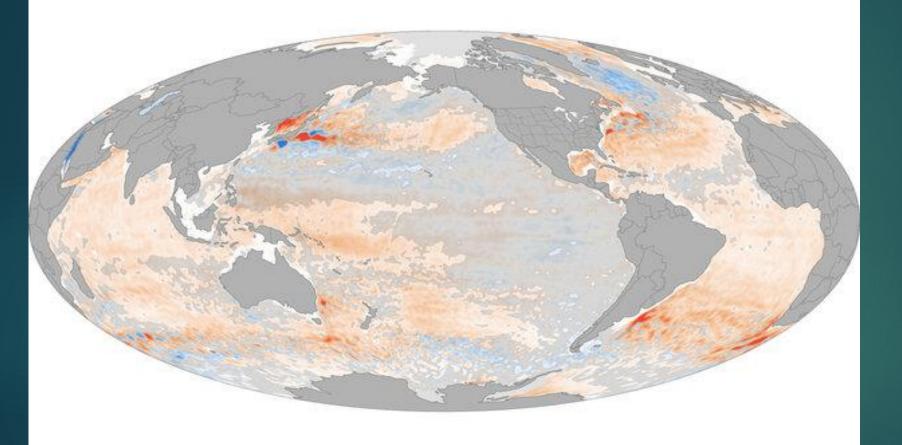


Not immune from failure when certain conditions prevail.

What is happening to our climate?

- Global warming is a reality, 30b tonnes of CO² are released into the atmosphere every year, hangs around between 300 – 1000 years.
- The last nine years (2014–2022) rank as the nine warmest years on record.
- Warmer air holds more water and has more energy than cooler air.

OCEAN HEAT TRENDS (1993-2021)



Probably skewed by long stretch of La Nina

(Dave Bellamy Plant & Food Research)

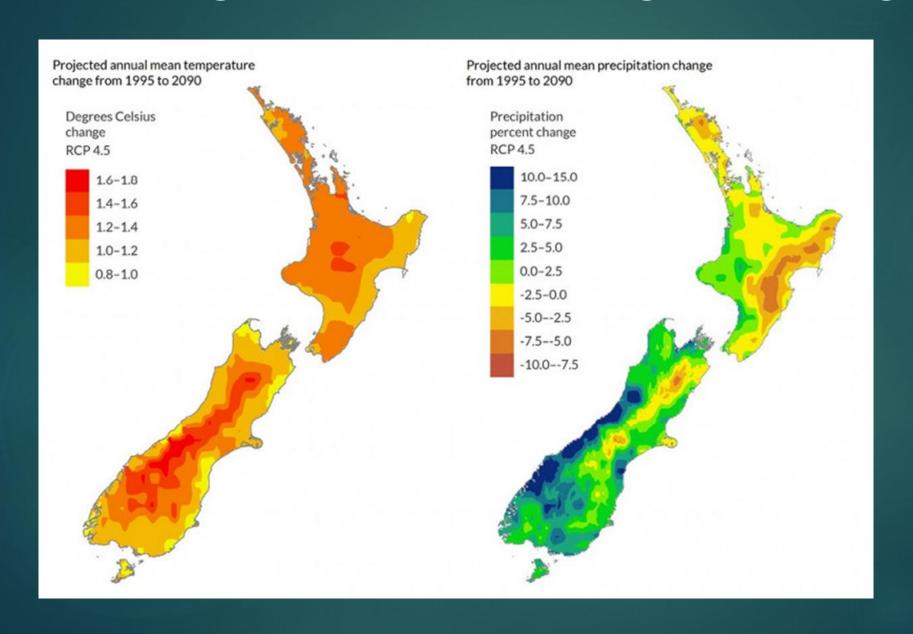
Change in ocean heat content (W/m²)

-6 0

1993-2021

NOAA Climate.gov Data: PMEL

Increasing temps: Flooding or Drought?



What does the future hold?

- More volatility and extremes (flooding, hail, heat)
- Disease e.g. European canker plus other biosecurity threats likely to increase with warm & wet
- Trellis structure designs to cope with point 1.
- Can't rely on commercial insurance