# Our Multispecies Pasture Journey

Schuler Ag P/L

Karrinjeet Singh-Mahil and Brian Schuler







### What was changing on the farm?

- Perennial ryegrass pastures not surviving the longer, hotter, drier summers
- Winds becoming stronger and more frequent
- More frequent 'bad' seasons, fewer 'good 525 kg MS/cow
- Cow health impacts
- Budget blow-outs





### What did we do on the farm?

- Investigated new pasture species deeper rooting, complementary species within and across seasons, multi-species pastures
- Planted more summer crops (multispecies)
- Increased effluent-holding capacity
- Increased use of compost

















- Oats
- Ryecorn
- Purple vetch
- Diploid annual ryegrass
- Winter wheat
- Forage rape
- Leafy turnip
- Linseed
- Crimson clover
- Peas
- Chicory
- Tillage radish
- Plus beans, cocksfoot, plantain and lucerne...





## What was growing on the side of the road?

- Prairie grass
- Yorkshire fog
- Cocksfoot
- Phalaris
- Barley
- Fescue





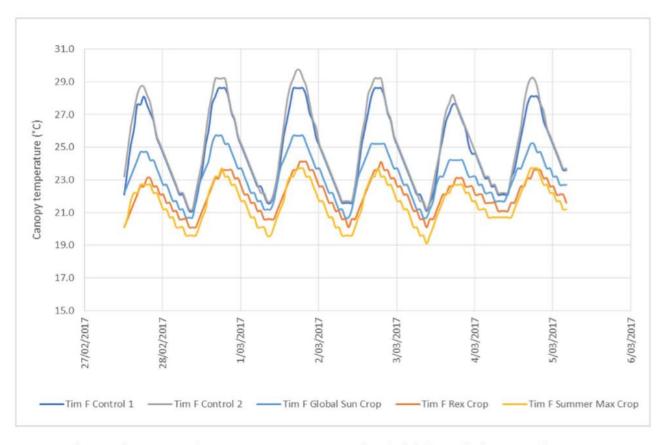
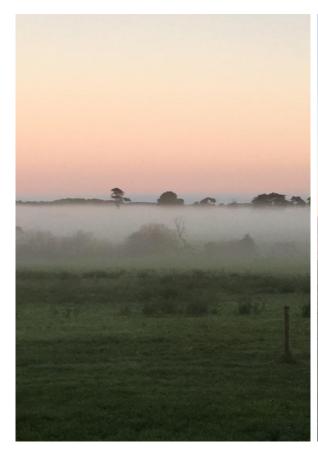




Figure 2. Shows reduction in soil temperature at 10cm. Control and Global Sunn had no ground cover.















The economic case:

Adaptation saves you money.

Summer 2015/16 – 600t of hay purchased @ \$200/tonne = **\$120,000** 

Summer 2017/18 – 125t of silage purchased @ \$220/tonne (DM) = \$27,500

68t hay purchased (winter) @ \$240/tonne = \$16,320 **Total \$43,82**0

2021 and 2022 (excellent seasons) we bought less than 100 tonne but carried over a stack of silage. Mostly for lot-fed young stock rather than the herd (apart from straw as fibre against the green feed and some for calving cows.)

Adaptation can make you money.

Higher quality feed available to the herd through more of the year can mean a flatter production curve which allows a dairy farmer to take advantage of higher prices in "off peak" times of year, and can also mean more milk produced more cheaply.



### What we've learnt

- Everything counts!
- Recycling is a way of life and can cost but can save you more money
- Cows eat more feed in the paddock through more of the year
- Lower cost
- Better quality
- Less methane
- Less silage
  - Less cost
  - Less plastic
  - Less time
  - Less wastage
- Better ground coverage = less erosion + better moisture use and retention
- Mono-cultures are not natural and are more vulnerable to attack (army worm etc)





#### What we've learnt

- Learn from the past, learn from others, learn from your own experience
- If something you try fails, that doesn't mean you have failed; you have learned.
- Keep trying. Our environment is changing and standing still is not an option.







### The future



- Continue to change pasture base
- Plant shade and wind-break trees
- Work towards generating more electricity either through solar, methane (effluent) or wind
- Diversify