RED MEAT UPDATES

TASMANIA

27 July 2018

Dryland farming in New Zealand

Derek Daniell

Masterton

Handling droughts in the North Island hills

- Hill country, no feed crops, no supplementary feed
- Wairere — high stocking rates (25DSE/ha)
- Annual rainfall — 1125mm (wet winter, dry summer)
- Drought is relative — 66 years recording:
  - October – March 148mm
  - September – February 180m

- Wind run averages 35km/h at 530m above sea level
- Can get very wet (500mm in a month)
  - Erosion, waterlogged soils, pugging, poor lamb survival
- Watch rain gauge like a hawk!
- Weather stations with soil temperatures on different aspects — check by mobile.

Wairere

Wairere two-tooth and four-tooth ewes, March 2013

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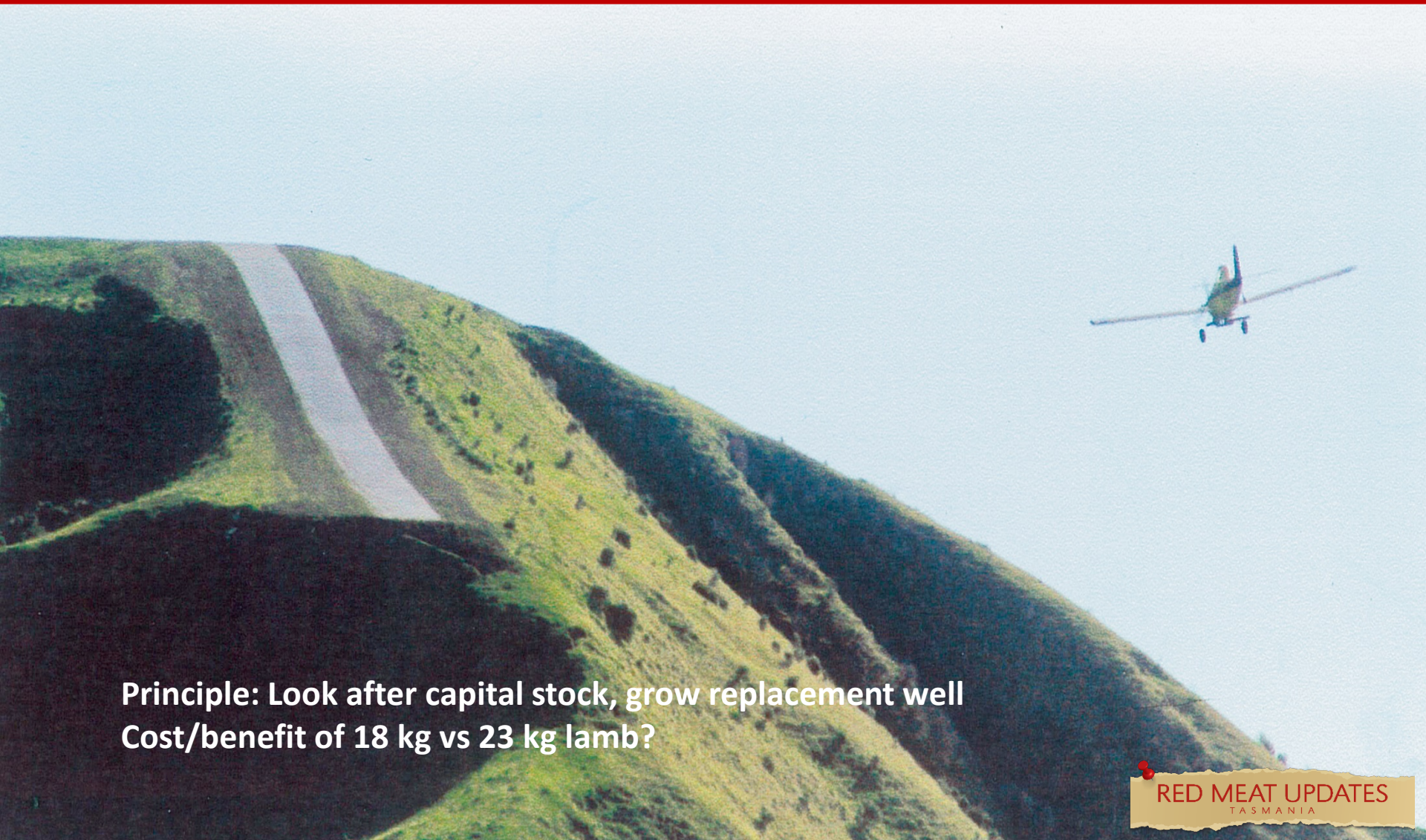
Operational calendar

- Lamb September (hoggets October).
- Calve November.
- Many farmers have only dry cattle, use as a buffer.
- Wean lambs early if drought (70–80 days old) and sell early.

Pasture management

- Graze stock away (NZ has many microclimates).
- Annual fertiliser input — target high soil fertility and lime → more resilient pastures.
- Rotational grazing (not set stocking).
- Nitrogen fertiliser applied by aeroplane (quicker recovery).
- All-weather airstrips.

White rock all-weather airstrip



Principle: Look after capital stock, grow replacement well
Cost/benefit of 18 kg vs 23 kg lamb?

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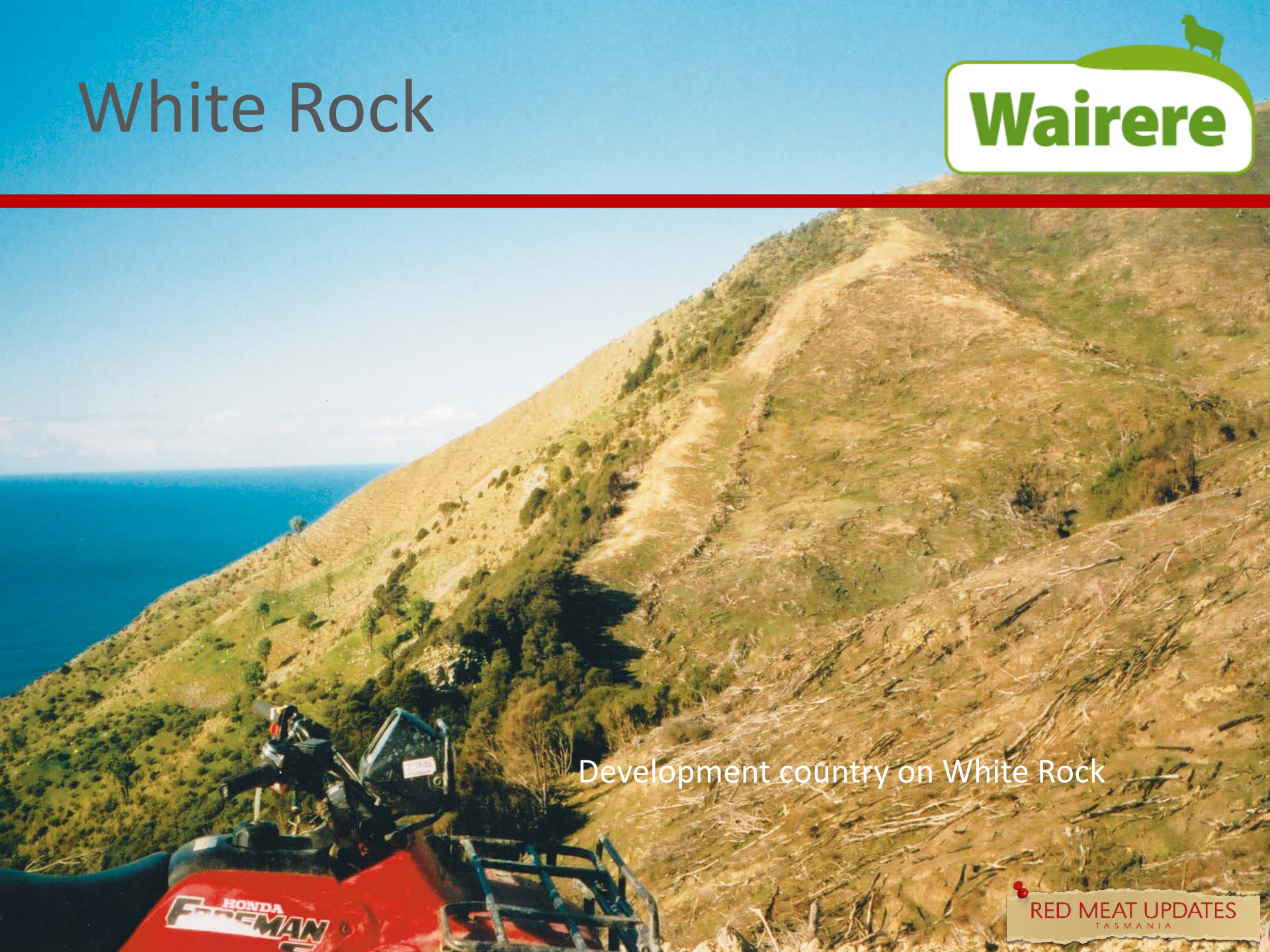
White Rock

- Coastal hill country
- ALL sale lambs weaned and sold late November or December.
- Ewe lambs grazed off-farm on good land for 12 months.
- Many have lambs as hoggets.

White Rock

- Come back at 15–16 months old @65 kg.
- Some cattle grazed away in droughts.
- Flexible farm boundary.

White Rock



Development country on White Rock

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Central Otago

- 380mm rainfall (flats irrigated or dryland lucerne for winter feed — to -20°C)
- 4400ha hill block has light stocking rate.
- Back country at 1900m above sea level gets 700mm rain.
- Quarterbred flock lambing 114%.
- Rabbit problem. Infrared scope on rifle.

Tom Costello, north Canterbury

- Same latitude as southern Tasmanian.
- 700mm average rainfall, but 450mm in bad year (sometimes winter wet and summer dry).
- Inland basin climate — strong wind run, with 30–40 degree temperatures.
- 550ha (35ha irrigated).
- Has grown the business.

Tom Costello, north Canterbury

- Started with 200ha (also has 40% share of 800ha hill country farm in North Island).
- 3000 Romney ewes, 550 pregnant ewe hoggets and 300 Friesian bulls.
- Mix of soil types: 50% bony/dry, 30% medium and 20% deep.


Wairere
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Wairere
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Tom Costello, north Canterbury

- Lambing 153–162% (hoggets 60–80% — 700 to ram)
- Average lamb weight 17.5kg. 3000 sold before Christmas at average of 100 days.
- Bulls sold at two years old (October–November) 350–380kg cw. Mainly on heavier soils.


Wairere
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$ returns

- 2018, grossed $NZ 1548/ha.
  Net profit $900/ha, allowing $70,000 for management.
- Lambs this year averaged $125, but during past few years $87–92 (well below Australian prices).
- Worst drought year, grazed cattle away and fed barley to sheep ($70,000 cost).
  Net profit of $270/ha.

$ returns

- Red Meat Profit Partnership benchmarking showed this farm the most profitable in the region.
- Better returns than the composites next door.
- Tom credits Australian sub-clover.

Pastures

- Range in annual dry matter (DM) production: 4000 –10000 kg DM/ha.
- Visited research stations in Victoria, NSW and WA in 1995. Brought back a dozen sub-clover seed species for a trial plot but also got Wrightsons to bring in 500kg Leura sub-clover.
- Sub-clover is the engine room on the drier soils. The change to Leura has been significant compared with the resident Mt Barker.

Pastures

- Looks after pasture by spelling, rotational grazing with ewes and lambs in spring.
- Planted extra shelterbelts at 140m intervals. Cuts wind effect, grows 60% more feed compared with open ground and extends the spring growth by three weeks, which allows the late-seeding Leura sub-clover to succeed.


Wairere
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Low-cost approach

- Has same 30-year-old pastures.
- Has own direct drill (may stitch in clover or grass seed after a drought).
- Better soils under irrigation grow red clover and ryegrass – persistence.
- Fertiliser input at $9.50/wet stock unit, $90/ha. Phosphorus (P) levels 25, potassium (K) high, needs sulphur (S) EVERY YEAR REGARDLESS.


Wairere
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Always experimenting

- Fodder beet first year, 20 – 25t/ha crop. Will feed off with straw, baleage, grass available
- But direct drilled, total cost $1000/ha. Conventional cost $2500/ha.
- Fodder beet proved consistent during drought years in Canterbury. Excellent winter growth rates on young cattle, and better eating quality.


Wairere
Low-cost fodder beet crop, 20 – 25t/ha
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Other feed crops

- Raphno brassica (mix of radish and kale). Can graze a number of times, over 10 – 12 months
- Lucerne — bought some land with lucerne paddocks five years ago. Not as good as sub-clover with lambs at foot
- Trying new variety of cocksfoot (Savvy) on lighter soils.
- Ryegrass will die off, but will spread again naturally during the better seasons.
- Tall fescue will not survive on the lighter soils.


Wairere
Tom Costello with Raphno brassica.
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Other developments

- Trialled several types of terminal sires with monitoring from processing company.
- Has signed up and paid for Hurunui irrigation scheme.
- Will require major stock policy change.
- Bought farm in North Island, much cheaper, will sell for capital gain.
- Trialled leaving lambs with tails on.
- **Benchmarking** — North Island farm is a member of farm discussion group. Full financials, return on capital.

Stock policy

- Starts lambing 17 August
- Half the ewes to Wairere Romney rams. Half to a terminal composite, Poll Dorset/Romney.
- Weans replacement ewe lambs in November. Leaves male Romney lambs on ewes for drafting POM.

Stock policy

- Uses cattle as a buffer in poor feed years. Reared Friesian bull calves to get back into cattle after droughts.
- Two ewe mobs behind electric break fence during winter (daily breaks).
- Flexible – how to handle extraordinary autumn this year?
- 3000DM/ha vs 1400 average vs 800 in poor year.

Low-cost, but intensive

- Local woman works part time, $27,000/year.
- Wife is full-time school teacher (off-farm income).
- Does seven days per week when required.
- Costs of $650/ha, including drawings.
- Regenerative and sustainable.

Difference to Tasmania

- Good schedule for lighter lambs.
  17 – 19kg is sweet spot in NZ.
- Different mindset — lamb later, wean younger. Some NZ farmers weaning at 55 – 60 days onto ‘high-octane forage’.
- Target higher kilogram carcase weight per hectare by later lambing, higher stocking rate, higher lambing percentages.

Difference to Tasmania

- Not much cash cropping.
- Grain is used during drought at 300gm/ ewe/day and have fed for up to three months. In an average dry year would feed ewes barley for 15 – 20 days into mating. Cost usually $300 – $400/t.
- Drier areas (300 – 550mm annual rainfall) have irrigation or light stocking rate.


Wairere
Ewes on barley.
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Top three take home messages

- Monitor rainfall — act early.
- Resilient pastures — fertiliser | best species.
- Look after capital stock and replacements

Proven **Predictable** **Profitable**

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Tools, resources and training

- Local discussion groups
- Leadership courses
- Nuffield Scholarship opportunities

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