

Riverside Farm - Massey University

History:

Riverside Farm is owned by the Sydney Campbell Foundation; Massey University has leased the land since 1978 based on a 99-year term (with right of renewal). The farm consists of two blocks, the main unit (650 ha) and the smaller and less developed Mikimiki block (75 ha).



Objectives:

- To expand knowledge about pastoral sheep and beef farming in summer-dry areas (particularly Wairarapa).
- To provide a facility for quality research, teaching and extension in sheep and beef farming.
- To be managed as a profitable commercial sheep and beef farm.
- To provide a link between the University and Agribusiness.

Station:	Riverside
Farm no:	12918
Manager:	Digby Lowe
Partner:	Robyn
Total area:	725 ha, 686ha effective

Legal Description: The farm consists of two blocks, the main unit (650 ha) and the smaller and less developed Mikimiki block (75 ha). Riverside Farm is owned by the Sydney Campbell Foundation; Massey University has leased the land since 1978 based on a 99-year term (with right

of renewal). The farm consists of two blocks, the main unit (650 ha) and the smaller and less developed Mikimiki block (75 ha).

Lease Details: Term 100 years from 1 March 1978 renewable for a further 100 years.
Rental: \$27,000 pa
Rent reviews: 10 years

Valn. Roll No: 8160/008

Local authorities: Wairarapa District Council

Location: The main block is located approximately 11 km north to north-west of Masterton, with land bounding SH2 and Mikimiki Road. The Mikimiki block is located approximately 6 km west of the SH2.

Delivery Instructions: Heading 8km north from Masterton turn left onto Mikimiki Rd from SH2. Riverside entrance is located 800m on right.

Services: All major commercial services at Masterton (9km) Primary school at (15km and 20 minutes), Secondary Schools at Masterton.

Contour:

Flat to Undulating	480	70%
Rolling	100	14.5%
Strongly Rolling	80	11.6%
Moderately Steep	26	3.9%

Soils:
Main block:

Kohinui series and Tauherenikau series (intergraded yellow-brown loam and yellow-brown earth) dominate the terrace between the river and the State Highway, with recent soils (Greytown series) surrounding the current river bed. Soils of the Kohinui series also occur on the western side of the river, bounding with the Konini hill soils that mantle the hills on the north of Mikimiki Road (with a small proportion of Mikimiki steepland soil also occurring). History Kaikoura series limestone hill soils dominate south of Mikimiki Rd and west of the river, with Otukura series gleys in the south-west and some Konini series mudstone hill soils also present.

Mikimiki block:

Mikimiki steepland soils (greywacke).

Climate:

Climate data for Masterton

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
Average high °C	24.3	24.0	21.9	18.8	15.4	13.2	12.1	13.1	15.4	17.5	19.8	22.1	18.1
Daily mean °C	18.1	17.7	16.3	13.1	10.5	8.6	7.6	8.4	10.5	12.3	14.2	16.4	12.8
Average low °C	11.8	11.4	10.6	7.5	5.5	4.0	3.1	3.7	5.6	7.1	8.7	10.7	7.5
Rainfall mm	44.4	68.9	84.5	54.0	93.6	105.3	90.9	86.7	73.7	77.2	77.5	70.9	922.9
Avg. rainy days	7.1	7.6	10.1	9.2	11.0	13.2	14.1	14.1	11.7	12.8	10.0	9.7	129.8
% <u>humidity</u>	76.0	82.9	84.2	87.0	89.5	91.3	91.1	89.6	83.5	79.0	78.8	76.9	84.2

Riverside receives closer to 1300 mm. Prone to summer droughts and severe Easterly storms. January/February/March are the driest months with June/July typically the wettest period. 1800mm on farm. The data above is the nearest recorded Council weather station.

Altitude: **Main block:** 200 – 300 m above sea level.
Mikimiki block: 300 – 400 m above sea level. metres ASL

Noxious Weeds: Variegated and nodding thistles

Noxious Animals: Rabbits, Hares, Deer.

Registered Earmark:

SUBDIVISION/WATER:

The property is subdivided into 105 paddocks and 5 holding paddocks. Fences are about 50% conventional and the rest 3 or 4 wire electric.

Water is sourced from the Waiau River and pumped to a tank on top of one of the hills. From there it is gravity fed back through most of the farm. About 15 paddocks have either dams or creeks for water.

The Mikimiki Block has a recently installed gravity-fed reticulated water supply sourced from an internal spring.

FARM BUILDINGS:

Riverside Homestead	Farm Manager
Dwelling 2	Shepherd General
Dwelling 3	Rented

All houses in reasonable condition except the Riverside cottage which is in average condition.

Main woolshed is eight stands. Covered yards at Riverside with 2,000 ewe capacity. One set of cattle yards and a further set of poor condition satellite yards and a good set of satellite yards on the Mikimiki block

COVER: As at 30th June 2021

Riverside Block	
Improved Pasture	78.1ha
Chicory/Clover	11.0ha
Feed Oats/Rape	10.0ha
Autumn Sown New Grass	8.0ha
Hybrid Rye/Red/White Clover	28.0ha
Old Pasture	<u>479.0ha</u>
Total Effective	<u>614.1ha</u>
QEII Covenant	3.4ha
Shelter belts/Trees	21.0ha
Races Tracks waste	<u>11.5ha</u>
Total Riverside	<u>650.0ha</u>

Mikimiki Block

Improved Pasture	22.0ha
Old Pasture	50.0ha
Total Effective	72.0ha
Races Tracks waste	<u>3.0ha</u>
	<u>75.0ha</u>

Total Area	725ha
Total Effective Area	(Effective 686.1ha)

Stock Policy:**Sheep –**

3,400 Romney ewes are run. 50% of the offspring are sold store the majority off their mother in the 2nd week of December, the balance are finished on summer crop. Approximately 500 of the 950 ewe hoggets are put to the ram the 1st of May with all progeny sold store. Numbers have varied on Riverside in recent years to accommodate research trials.

Future Targets:

	Last Year	Current	Year 3
Sheep	2020/2021	2021/2022	2024/2025
Scanning %	179%	184%	185%
Ewe Death %	4.95%	4.86%	4.1%
Lambing %	144%	148%	150%
Dry %	2.9%	3.9%	2.5%
Weaning Weight	27.1kg	29kg*	33kg

Beef –

Riverside's beef the policy centres on two age classes of steers to control the volatile summer production and if necessary act as a buffer mob.

Key Strategies to Improve Cattle Performance are:

- Target winter growth rates of over 0.6kg/day for June and July with the use of crops
- Kill over 60% of animals before the second winter.

Future Targets:

	Last Year	Current	Year 3
Cattle	2019/20	2021/2022	2024/25
Cattle Deaths	0.6%	1.0%	1.0%
Prime Steer Carcass weight	316.33Kg	320kg	325kg

2021 Wintering Stock Numbers (@ 1 July 2021):

SHEEP	Numbers	Stock Units
MAEwes	2,389	2,389
2ths	975	975
Ewe Hoggets (Dry)	124	99
SIL Ewe Hoggets (SIL)	1148	1148
Rams	47	38
Sheep Total	4,683	4,649
CATTLE		
R2 Yr Steers +	260	1300
R1 Yr Steers	108	486
Cattle Total	368	1,786

6,435 SU

Fertiliser:

Fertiliser programmes based on soil tests results.

Year	pH	Olsen P	SO4	K
2010	5.6	25	11.4	8.3
2012	5.8	18	12	11
2016	5.6	16	13	8.3
2018	5.8	15	8	7.0
2020	5.5	13	10	7.0

2021 Fertiliser programme was as follows:

Hill Country 330kg/ha Super + Se (0.5 kg/ha)

Easier Country + Mikimiki 250kg/ha Sulphur Super 15 + Se

Nitrogen fertiliser is also used strategically to boost lambing covers before set stocking on the multiple lambing areas.

CURRENT RESEARCH:

1. Breeding a self-shedding sheep

A multiyear flock study is occurring at Riverside Farm recording production and performance as a flock is graded up from Romney to a Wiltshire flock.

Modelling has indicated that in the long-term a change to a self-shedding flock will be profitable however our model is limited by lack of objective data in regard to production data over the transition period. Current assumptions are based on anecdotal industry data, or trial data from more than 20 years ago. The modelling suggests that the coarse wool greasy price would have to exceed \$4.15/kg greasy to break even on the costs of shearing in many farming scenarios.

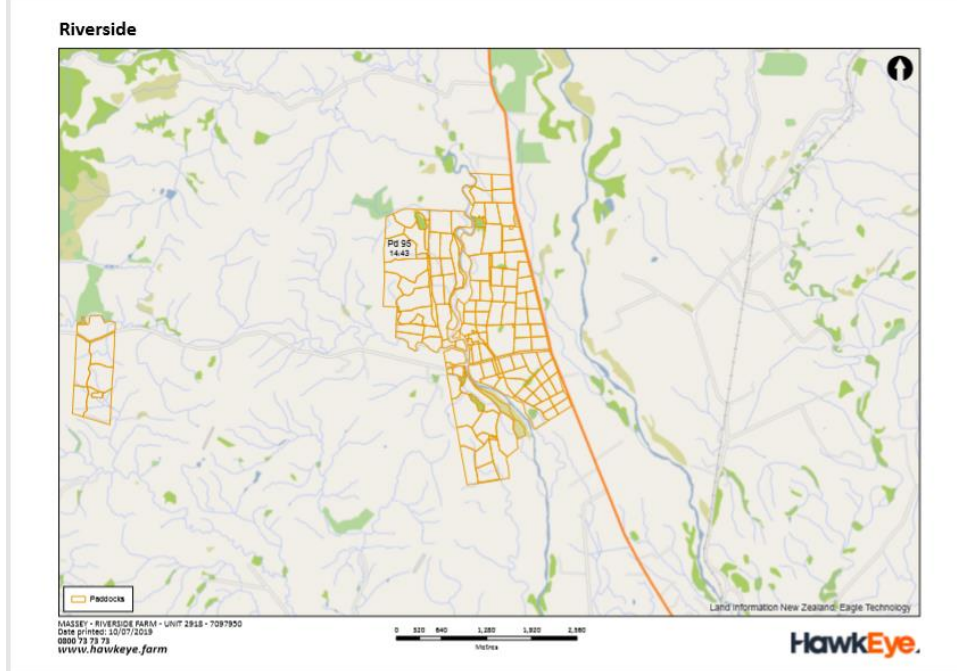
2. A small seed trial involving a commercial seed company is also undertaken on Riverside

Labour:

1 Farm Manager
1 Shepherd General
Casuals as required



Riverside Farm- Locality



Riverside Farm-

