Port Marlborough
Marlborough Environment Awards 2025

Sound environmental management is good business

CATEGORY SPONSOR: Federated Farmers of New Zealand

Judges' Report

CATEGORY:

Farming

Mt Rimu Farm

INTERVIEWED	Brent and Hamish Morrison
DATE	28 November 2024
JUDGES	Pete Anderson, Cath Baker and Wendy Sullivan

INTRODUCTION

Mt Rimu Farm is a family-run dairy operation located in the Rai Valley, owned and run by Brent Morrison and his sons Hamish and Justin. The primary farm spans 264 hectares alongside the Rai River, with additional holdings including an 87-hectare dairy support block in the Ronga Valley, bisected by the Ronga River, and a 16-hectare runoff in the Opouri Valley. These properties feature numerous streams and wetlands interspersed throughout the paddocks.

In addition to dairy farming, the Morrisons manage 70 hectares of farm forestry, established on retired sheep and deer hill paddocks. The forestry includes a diverse mix of timber species such as *Pinus radiata*, Douglas fir, Redwoods, Lusitanica, Blackwoods, Larch, Japanese Cedar and Liquid Amber.

Over the past decade, the Morrisons have accelerated their environmental practices, including fencing waterways and wetlands, implementing native and exotic riparian plantings for erosion control and animal welfare, and improving soil and fertiliser management.

GENERAL INFORMATION

Mt Rimu Farm lies within the Rai Valley catchment and is part of the Te Hoiere Project. This initiative, launched in 2019, aims to restore the Te Hoiere/Pelorus catchment "from mountains to the sea" (ki uta ki tai) as a national model for community-driven environmental restoration. The project is supported by multiple partners, including the Ministry for the Environment's At-Risk Catchments Programme and the Department of Conservation (DOC).

Prior to joining the Te Hoiere Project, the Morrisons were already implementing sustainable practices aligned with their Fonterra Farm Plans and personal goals. Key initiatives included:

- Fencing off all waterways and wetlands.
- Installing culverts and bridges to eliminate stock access to waterways.
- Establishing the region's first lined effluent pond over a decade ago and using effluent as a resource to improve soil fertility.

Participation in the Te Hoiere Project allowed the Morrisons to access subsidies for further improvements, such as:

- Introducing dung beetles to enhance soil structure and reduce runoff.
- Planting over 9,000 native plants to restore riparian zones and stabilize erodible slopes.

The Morrisons employ a range of innovative sustainability measures to improve soil health, manage waste, and reduce environmental impacts:

- Whole farm – all paddock soil testing is conducted every three years and using their own GPS spreader with TracMap to precisely apply fertiliser based on paddock-level requirements.
- Direct-drilling summer turnips to absorb surplus nitrogen in the soil.
- Using AgRecovery for plastic farm container recycling and Plasback for baleage wrap.
- Using N-protect urea fertiliser in summer to reduce nitrogen loss to the atmosphere by up to 50%.
- Applying effluent as a nutrient resource for paddocks over 30% of the farm receives dairy shed effluent irrigated through K line.

The Morrisons' forestry efforts include planting diverse tree species to serve multiple purposes, such as riparian protection, shade, amenity, and timber. Unproductive or erosion-prone areas are strategically planted to reduce runoff and prevent soil degradation. The multi-land-use approach enhances income diversification and provides resilience against market fluctuations.

THE JUDGES WERE IMPRESSED BY

- Diversity of tree species to meet environmental, aesthetic, and economic goals.
- Continual investigation into niche forestry markets to diversify income.
- Early adoption of dung beetles to improve soil health and reduce run-off.
- Fully knowing limitations of farm system and adaptive management such as avoidance of cows on erosion-prone hillslopes, avoiding winter grazing of crops and using hay and balayage for winter feed.
- Soil testing and adaptive fertiliser management; using a GPS fertiliser applicator for targeted and efficient nutrient application.
- Using effluent as a resource.
- All water systems are fed via gravity
- Riparian restoration with extensive native plantings of riparian margins, wetlands and unproductive land.
- A diverse farming model incorporating dairy, forestry, and conservation for income stability and environmental resilience.
- Spelling the Rimu Gully property and running stock on the Ronga run-off paddocks during winter where little pugging occurs.

PROBLEMS AND HOW THEY HAVE BEEN TACKLED

- The Rai and Ronga Rivers are prone to flooding during heavy rainfall, leading to bank erosion and sediment or debris smothering paddocks and damaging fences. Planting riverbanks with willow and poplar trees has helped stabilize the banks. Additionally, using a single live wire for fencing reduces breakages and simplifies cleanup after floods.
- Invasive weeds such as old man's beard, Himalayan honeysuckle, and blackberry persist along riparian margins, requiring ongoing attention. Participation in Te Hoiere Project has provided support for plant release. As riparian plantings mature, the weed issue will diminish, but continuous time and resource allocation remain essential to control this challenge effectively.
- High rainfall increases the risk of sedimentation and nutrient runoff into rivers. Paddocks are carefully managed to minimise runoff and prevent sedimentation, ensuring that nutrient inputs are effectively controlled to safeguard water quality.

SUMMARY

Mt Rimu Farm showcases the integration of sustainable farming practices with environmental stewardship. The Morrisons' commitment to improving water quality, restoring ecosystems, and managing resources efficiently reflects a proactive and innovative approach to agriculture. Their efforts, supported by Te Hoiere Project, showcase how a multi-use farming system can balance productivity with conservation. Their commitment to innovation, collaboration, and adaptability sets an inspiring example for the agricultural community.

SUGGESTIONS

- Use Matsudana willow for riverbank protection, as Crack willow is highly invasive and its propagation is prohibited under the National Biosecurity Act 1993.
- The spread of blackwood is not well-documented and remains a topic of controversy; consider this an opportunity to map its distribution, record the growing conditions of wildings, and share insights with other forestry professionals.
- Purchase certified seed or request a Purity and Germination (P&G) certificate with all seed mixes to ensure it has been tested and verified as free of weed seeds.
- Incorporate more clover species into pasture mixes to improve nitrogen levels and enhance drought tolerance.
- With pioneer native shrubs now established, begin interplanting with canopy species such as rimu, matai, and kahikatea.
- Implement predator trapping to support habitat restoration initiatives.
- Measure and calculate emissions and investigate becoming one of the few carbon neutral/negative dairy farms in NZ.