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## JUDGES' REPORT

### WINE INDUSTRY REPOST

<b>INTERVIEWED</b>	Greg Coppell and Liam Garlick
<b>DATE</b>	26 January 2023
<b>JUDGES</b>	Andy Frost and Bev Doole

#### INTRODUCTION

It took a farmer to come up with the idea for Repost, a company that recycles broken vineyard posts into fence posts instead of having them dumped in landfill.

Stockpiles of broken vineyard posts are a serious environmental issue for the wine industry. The pine posts are chemically treated to preserve the timber which creates a waste disposal issue when the posts break.

The posts need to be disposed of carefully in landfill to avoid leaching of the chemicals. Many are left in stockpiles on vineyards instead.



Repost repurposes the broken posts by removing the nails and trimming to fence post length. These are sold to farmers at an affordable cost and are used to fence off waterways and significant natural areas.

The judges were impressed at the practical, problem-solving approach and the environmental benefits: Each Repost post used on a farm is one less grape post going into landfill.

## GENERAL INFORMATION

Greg Coppell is a farmer who with his father Allan used to spend hours pulling the nails and plastic clips out of broken grape posts to provide fence posts for his farm near St Arnaud. Tired of the pliers and brute force, he knew there had to be a better way.

They developed a machine during the 2020 lockdown that operates like a vice. The post and nails are lined up, the vice clamps down and the post is pushed back to the operator by hydraulic plates. The nails and plastic clips fall into a container below and the bare post passes on to a second operator who saws it to length. Most are docked (straight cut at the end) but some orders require a point to be cut.

The posts are bundled and stacked, then loaded on trucks for delivery to farm customers around New Zealand.

Once the machine was built Greg teamed up with Marlborough viticulture consultant Stu Dudley and together they are developing a strong customer base of wineries and farmers. They are supported by Dansy, Greg's wife, and her sister Gabby who manage marketing and business development.

A solution to vineyard post stockpiles and associated environmental issues is long overdue. The pine posts are chemically treated with Copper, Chromium and Arsenic to preserve the timber in the ground. Broken posts can only be burnt in a specialist furnace or taken to landfill. Many vineyards choose to stockpile the posts instead. Marlborough District Council research shows that the chemicals leach out over time and contaminates the land beneath the piles.

It is estimated that 375,000 posts are broken in Marlborough each year (an average of 2-3% per vineyard). The most common issue is snapping at ground level or just below, especially during harvest. Rather than seeing this as waste, Repost treats the stockpiles as a resource to be reused. A Repost crew can process 600-900 posts a day, equating to about 200,000 posts a year. They aim to deal with the current stockpiles and then keep on top of annual numbers.



Repost currently works with large growers, including Yealands and Delegats, as well as smaller contract growers. Repost charges the grower 80% of what it would cost to send the broken posts to landfill (\$1 to \$1.15 per post).

The Repost operation is set up on-site at the vineyard, producing half-round and quarter-round posts at 1.6m or 1.8m lengths. Prices range from \$3.25-\$4.65 per post, about a third of the cost of a new one.

The finished posts are trucked throughout the country. The main customers are sheep and beef farmers in Wairarapa, Manawatu and Southland who need stock, shelterbelt and riparian fencing. The posts are a lower-cost solution to increasing legislative requirements to keep stock out of waterways.

Key environmental benefits of this project:

- Reducing the number of CCA-treated grape posts going into landfill (Repost diverted 1400 tonnes of waste from landfill in their first two years and are on track to achieve 3750 tonnes per year).
- Reducing the risk of soil contamination caused by large stockpiles of broken grape posts.
- Turning waste into a resource that can be used. Prolonging the lifecycle of existing posts and reducing the need to produce new chemically treated posts.
- Helping farmers keep stock out of waterways to reduce sedimentation, improve freshwater quality and restore habitat.
- On-site processing reduces carbon emissions from trucks going to and from landfill.
- Careful loading of delivery trucks to maximise space and reduce the number of truck movements and carbon emissions.

### THE JUDGES WERE IMPRESSED BY:

- The sensible, practical approach to deal with broken vineyard posts that is an all-round win for Repost, the wine industry, farmers and the environment.
- The drive for continuous improvement:
  - Now working with Mk4 of the machine design, which is more compact, portable and efficient. Staff are working at ground level, rather than in a raised container.
  - Seeking funding to find a way to separate plastic clips from steel nails. This would enable the plastic to be shredded and remoulded to create new clips, and the nails sold as scrap metal.
  - Plan to invest in a multi-rip saw to turn offcuts into smaller posts, pegs and battens. At the moment about a quarter of the tonnage processed still goes to landfill as offcuts.
- The business model that requires the grower to pay Repost to take their posts. It is important that the grower understands this is a waste stream from their operation and they need to take responsibility for it.
- Connection with customers – Greg and Allan are the epitome of farmer resourcefulness and Repost is a good fit for farming values.
- Collaboration between wine industry and farming - the partnership between Greg and Stu provides a strong knowledge base and all-round understanding of customers.
- An excellent website that tells Repost's story, provides technical information and pricing, and is easy to navigate.



## PROBLEMS AND HOW THEY HAVE BEEN TACKLED

- Health and safety requirements vary among vineyard owners. Following concern from a client, who is a key player in the industry and has significant stockpiles of broken posts, Repost is working on upgrading the machine to have the post enclosed when the vice removes the nails. At the same time, Greg is aware of the need to retain ease of body motion for staff to avoid muscle strains. Repost backs its staff training, standard operating procedures and health and safety protocols. The machine is foot operated. Staff are trained to have both hands on the post and keep clear of the vice plates. In two years of operation there have been no accidents, near-misses, bruised hands or muscle strains. However, they understand the need for the client's health and safety requirements and are working to get an engineering solution to meet the standards and resume the contract.
- The positioning of nails on each post is not consistent, which means each post must be individually assessed and handled. Some vineyards have extra attachments to be removed, such as weta guards. Staff are trained to assess the most efficient way to approach and load each post.
- Finding workers. With widespread labour shortages, it has not been easy to find staff. The Ministry of Social Development helped recruit three workers, and students are employed during the summer holidays. Repost is due to set up a second machine and team after receiving permission to recruit staff from the Phillipines. A recent appointment of a Site Operations Manager to manage health and safety, sales and logistics will take some of the day-to-day pressure off Greg.
- Convincing customers that second-hand posts are still high quality and fit for purpose. Repost recently had treatment tests undertaken that show their fence posts meet the specifications for H4 CCA treatment under the New Zealand Standards specifications. The test results are on their website. Repost will continue to carry out six-monthly tests to see how the posts are performing - they expect a 35-year lifetime. Repost has also partnered with the Fencing Contractors Association and expect this will be added reassurance for customers.
- Repost are investing heavily to attend primary industry Field Days (Central, Southern and National) in 2023 to introduce customers to the quality and environmental benefits of the repurposed posts.
- Burden of funding applications. Filling in funding applications is a fulltime job that they can not afford. Also the cost of getting CAD design for Government funding applications is out of their reach as a start-up. Repost is seeking like-minded investors to help raise capital and expand.

## SUMMARY

Repost is leading the way in dealing with broken vineyard posts - a serious waste stream for the wine industry - and reducing the amount going to landfill by repurposing the posts for farm fencing.

Excluding stock from waterways reduces sedimentation and improves freshwater quality and biodiversity. Repost's on-site processing also reduces carbon emissions and reduces the risk of land contamination from stockpiles of chemically treated posts.

Repost's goal is to divert all broken vineyard posts in Marlborough from going into landfill, and they are on the road to achieving that.

## SUGGESTIONS

- Engage with PRW as a priority to find a way to design a guard that meets their H&S standards. They may have examples of similar technology in their overseas companies that could be applied to this situation. Further engineering input may be available from Walter Laglois, a product design engineer based in Renwick. He invented the mechanised vine stripper and works with Pernod Ricard Winemakers on the Smart Machine autonomous vineyard tractor. [walter@machineryservices.co.nz](mailto:walter@machineryservices.co.nz) Ph. 027 281 7492.
- For potential investors make contact with Tracy Atkin at Angel Investors Marlborough. They support start-ups, including R&D. [tracy@marlboroughcapital.co.nz](mailto:tracy@marlboroughcapital.co.nz) Ph 021 794 379.  
Dorien Vermaas, Economic Development Programmes Manager at Marlborough District Council, may also have some ideas about funding sources. Ph 021 645 482  
[dorien.vermaas@marlborough.govt.nz](mailto:dorien.vermaas@marlborough.govt.nz)
- Arrange a meeting with Marlborough District Council Catchment Care Co-ordinators to encourage their contractors to use Repost for fencing waterways and significant natural areas. Contact Aubrey Tai, Catchment Care Co-ordinator (adviser to farmers in Te Hoiere Project who receive funding to fence off waterways.) [aubrey.tai@marlborough.govt.nz](mailto:aubrey.tai@marlborough.govt.nz)
- Link up with NZ Landcare Trust catchment restoration projects and make your product known to them. Nick Edgar, CEO, is based in Hamilton. [nick.edgar@landcare.org.nz](mailto:nick.edgar@landcare.org.nz)  
Ph 0800 526 322  
Wendy Sullivan is their Marlborough catchments co-ordinator.  
[wendy.sullivan@landcare.org.nz](mailto:wendy.sullivan@landcare.org.nz) 027 247 3503
- Continue discussions with Council to set up a Repost operation at the Blue Gum landfill to intercept the posts.
- Approach Bragato Research Institute about the possibility of being included in their annual Grape Days workshops. Sarah Rowley Adams, Senior Communications Advisor, 027 700 4219 [sarah.rowley@bri.co.nz](mailto:sarah.rowley@bri.co.nz)
- Your vineyard customers may be interested in the Council report on contamination from chemically treated vineyard posts.

[https://www.marlborough.govt.nz/repository/libraries/id:1w1mps0ir17q9sgxanf9/hierarchy/Documents/Your%20Council/Meetings/2017/Environment%202017%20List/Environment\\_16\\_March\\_2017\\_Item7\\_Vineyard\\_Post\\_Pile\\_Investigation\\_Ver10.pdf](https://www.marlborough.govt.nz/repository/libraries/id:1w1mps0ir17q9sgxanf9/hierarchy/Documents/Your%20Council/Meetings/2017/Environment%202017%20List/Environment_16_March_2017_Item7_Vineyard_Post_Pile_Investigation_Ver10.pdf)