## Establishing natives on farm using drone technology:

## **TRIAL RESULTS**





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## Otago South River Care conducted a trial to see whether it is possible to cost effectively establish native plants on-farm using drone technology.

**The site:** 0.8 hectare gully on a dairy farm between Balclutha and Clinton

**The timing:** we sowed seeds in September 2022 and returned in 2024 to assess the growth.

**The seed mix:** Flax, Koromiko, Kanuka, Manuka, Fireweed (Haloragus erecta) , Lemonwood, Cabbage Tree, Carex secta.

**The method:** the gully was grazed with cattle and then sprayed with round-up. We then mixed our native seed choice with rice (to help spread them) and scattered them using a drone. We ran cattle through the gully to trample the seeds into the ground and let nature go to work.

**The follow-up care:** We sprayed the gully using drones 3 or 4 times a year when competition growth from grass and weeds was at very early stages.

**The results:** It worked! We now have a gully full of flourishing knee-high natives.

The cost: Approx. \$10,000 per hectare

**The benefits:** It was cost effective and a hands-off approach to establishing natives.

**The challenges:** Only limited species will survive under the spray mix.

**The next steps:** In 2024 we are extending the trials into other areas, and trialling sowing in autumn verses spring. We are also exploring how we can suppress weeds using existing on farm spray equipment to further reduce costs.



{PHOTO Before the drone sowing}



{PHOTO The drone at work}



{PHOTO After the drone sowing; a flourishing gully}