

# Paddock Development Project

In 2022, we worked on the implementation of our Paddock Development Project, a raft of integrated new enterprises that aimed to create a huge range of opportunities in our paddocks, for greater food production, education and training, community engagement, biodiversity and carbon sequestration, and job creation.

This included:

- doubling our vegetable production with a new Market Garden space
- planting 150+ trees, including fruit trees, natives, and support species
- integrating our sheep with these trees in a silvopasture grazing system
- introducing a flock of pastured layer hens

To us, this represents a vision of our food future - community-centred, human-scale, diverse, ecologically-regenerative farming for nourishment, not commodity.

Industrial, fossil fuel-dependent monoculture farming is devastating our ecosystems, our health, and fuelling the climate crisis.

We urgently need a radical transformation of our food system. We need to visualise and create models that show us a different way forward. At Kelmarna, we have a unique opportunity to demonstrate these models in the heart of Aotearoa's biggest city.



# Market Garden

Starting at 300m<sup>2</sup>, we plan to create (at least) 600m<sup>2</sup> of new market garden, using regenerative no-dig, diverse plantings to grow an abundance of vegetables and feed our soil microbes to sequester carbon at the same time.

The market garden created a new job opportunity for a new farmer to join our team as Market Gardener, which started in May 2022.

This production-focused space will enable us to demonstrate financially and ecologically-viable market gardening, and train future farmers in the skills they need to replicate this, through our Farmhands programme, workshops, and other volunteering opportunities.

We run our Market Garden as a Community Supported Agriculture scheme, which will enable our community to continue to be heavily involved in this adventure for the long term.



# Silvopasture

Silvopasture is an agroforestry approach that combines trees and grazing livestock in a symbiotic relationship. We think most farms should have more trees and agroforestry systems have a huge part to play in transforming our food system.

Trees provide many benefits for animal welfare, moderating the microclimate to buffer extremes of heat, wind, cold, and rain. They also provide additional food for the animals, including important minerals that they are able to bring up from the subsoil.

Their deep root systems make good use of excess water in our wet winters, while retaining moisture in the landscape through our increasingly dry summers.

Tree lines will transform our paddocks from 2-dimensional to 3-dimensional, capturing more sunlight to maximise photosynthesis and carbon sequestration, creating habitat for wildlife, and food for humans and pollinators. In return, our sheep and chickens will cycle nutrients through their manure to provide available fertility for the trees.



# Sheep

Our sheep form a key element of the system, supporting healthy nutrient and water cycling for the pasture and trees, as well as maintaining the grass at a suitable height for our chooks to thrive in it.

We manage the rotation of our grazing animals with the aim of ensuring that our pasture is continually in its growth stage, when plants are pumping the most root exudates (carbon) into the soil, to feed soil microbiology and sequester carbon.

Including sheep in the system allows us to produce pasture-fed meat for our community directly from a source where they can be certain that it has been produced in the best way possible, using agroecological methods that prioritise the health of the animals and the wider ecosystem. The first step in transforming our food system is building transparent and trusting relationships between farmers and communities.

To find out more about why, and how, we include animals in our farming system, please [click here to head to our Farming Animals page](#).



# Layer Hens

We started with 30 hens of heritage breeds, bred to thrive in low input systems, such as food forests. However, we came to realise, through some trial and error that these breeds would not be able to provide a sufficient lay rate in our current environment. Over almost a year with us their productivity was much less than we anticipated, and so we started reviewing our options and researching other ways forward.

In version 2.0 of our Layer Hen project we are transitioning most of our flock over to birds with a higher rate of lay and which are better suited to pasture environments. We see the potential for our regenerative egg production system to provide a teaching model for aspiring small-scale farmers to participate in, learn from, and apply to their local communities elsewhere.

We believe there is an opportunity for a small scale, resilient laying operation that utilises local food waste, feeds a local market and provides valued livelihoods.

We are making our eggs available through a Community Supported Agriculture scheme, that reflects the reality that eggs are a seasonal food, with peaks and troughs during the year.



# What is Community Supported Agriculture?

Community Supported Agriculture (or CSA) is a partnership-based farming model where community members and farmers work together to grow and share food. CSA members commit up-front to buying a share of the farm's harvest for a period of time, essentially clubbing together to employ a farmer to grow their food for them. Members receive a box of fresh veggies each week, but accept that they are sharing the risks as well as the rewards of the CSA - when conditions are good, everyone will receive a bountiful harvest, but in the case of adverse weather or crop failure, members accept that they will each receive a little less.

The CSA model has many benefits for farmers and members:

- Secure funding for the season ahead
- Shared risk
- Community members connect more closely with their food, and what's truly in season
- Community members connect with each other through the scheme
- Minimal marketing/sales time, meaning we can focus on growing food
- No production food waste resulting from unsold food
- No packaging waste, from displaying or transporting food



# History, design, and consultation

The paddocks around Kelmarna's gardens have always been part of our site, mostly used for grazing livestock, but we haven't always had the time to give them a lot of love to reach their full potential.

In 2020 we worked through a large number of options for how we could put this land to good use and best achieve our strategic goals. We settled on the design outlined below, combining veggies, trees, and animals, in an integrated system. We then held a consultation event with our close community and key supporters, and put this vision out to our wider community for feedback.

Our plans received overwhelming support from our stakeholders and wider community. The process provided opportunities to engage in great conversations with our community, valuable constructive suggestions, and many generous offers of support in realising these plans.

At the end of 2021 we ran an ambitious crowdfunding campaign to raise the funds to get all these projects underway. The campaign invited members of our community to adopt an element of the project. We were absolutely blown away by the response from our community and new supporters, with an incredible \$96,500 donated by 489 people!

Along with key grants towards start up costs of these projects from Foundation North, Auckland Council, Waitemata Local Board, and Mazda Foundation.

Beyond the financial support, this incredible display of support and community engagement is inspiring and means a huge amount to our team in creating Kelmarna's future.