FARMING FOR THE FUTURE

CASE STUDY

A balancing act: Farming to improve biodiversity and production.

ANGUS & LUCY MAURICE

Pastured egg, grain, oilseed, lamb, wool and beef producers, Spicer's Creek NSW.

Angus and Lucy Maurice operate Gillinghall, a mixed enterprise farm of Merino sheep, cattle, crops, and pasture-raised chickens, where their aim is to balance profitable production and the long-term ecological sustainability of the farm.

Twenty years ago, inspired by a holistic management training course, the family set a goal: to increase the biodiversity on their property. After experimenting with a range of different approaches, they settled on dividing the property into two management zones. About one quarter of the property is managed regeneratively, with an emphasis on improving biodiversity in harmony with livestock production. For the remainder of the farm, the focus is on production, with a rotation of improved pastures and crops.

Developing a strategy that retains and enhances biodiversity, while also balancing production and profit, can be a challenge, however by using both conventional and regenerative farming practices side-by-side, the Maurice's have achieved that goal, while improving the health of special woodland areas.

"In our business, we're striving to achieve a balance between production, soil health and profitability. We believe soft soil can be created with diverse grasslands, but we don't know if they are as productive as improved pastures," Angus said.

"By using two strategies concurrently, we are balancing the health of our land with the need to operate a profitable farm.

"While we believe that regenerative farming improves soil health, we have seen production drop as we increase biodiversity and revert to more native grass pastures. However, if we chose to use improved pastures there will be higher farm emissions to establish them, so we need to understand this trade off zone."

Explicitly quantifying the production benefits of a biodiversity-focused farming strategy remains a key question for Angus and Lucy.

Angus and Lucy are part of *Farming for the Future*, a multi-year study that aims to quantify the contribution of different types of natural resources (natural capital) to profitability across thousands of Australian farms. With this new insight, they will be able to make more informed decisions about how to best manage their land for both its environmental and economic health.

"By participating in *Farming for the Future,* we're receiving a lot of information about the ecological state of the farm, and our emissions, which is information we haven't had access to before. We can see where we sit against other farms around Australia which will help us to make decisions in the future," Angus said.

In the meantime, Angus and Lucy enjoy the benefits of supporting biodiversity on their land. They enjoy living and working amongst the native vegetation, and particularly appreciate the aesthetics of the tree-lined creeks. And of course, there are marketing benefits: "hens that lay eggs in native grasses make extraordinarily good eggs", says Angus.

While producers have long known that a farm's natural capital will influence productivity and profitability, that relationship has yet to be properly quantified at scale. *Farming for the Future* is looking to change that, through research and the development of tools that will enable producers to bring their natural capital onto their farm balance sheets.