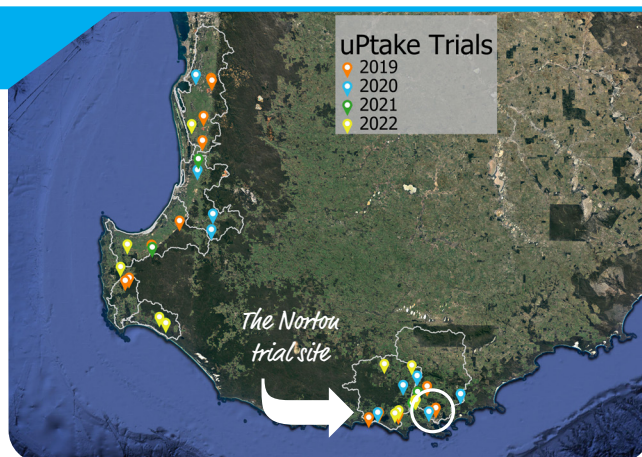


uPtake case study: Oyster Harbour catchment

The Norton trial



Jarrad Norton



Norton site

The award-winning uPtake project has increased farmer and industry confidence in the science behind phosphorus fertiliser recommendations by validating national critical soil test values for phosphorus (P) for south-west Western Australia (WA).

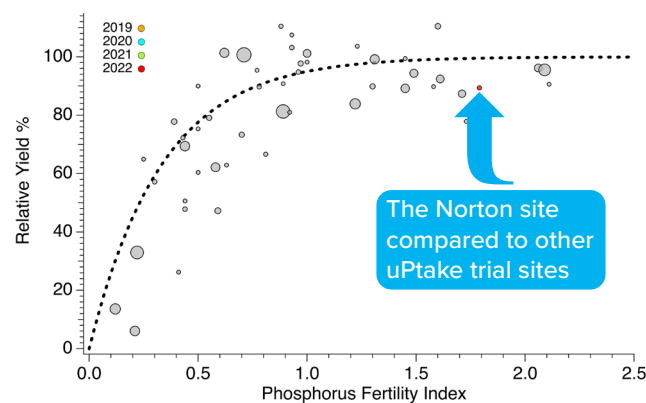
Chris and Jarrad Norton have been farming in the Redman area in the Wilson Inlet for 20 years. They are mixed livestock farmers on their McMurray Chorcerup farm.

“We took the opportunity to be part of the uPtake trials because we were interested in seeing what our soil and pasture nutrition was doing.”
– Jarrad Norton

The Norton trial was undertaken in 2022.

Site characteristics

	2022
Phosphorus buffering index (PBI)	19.1
P fertility index	1.79





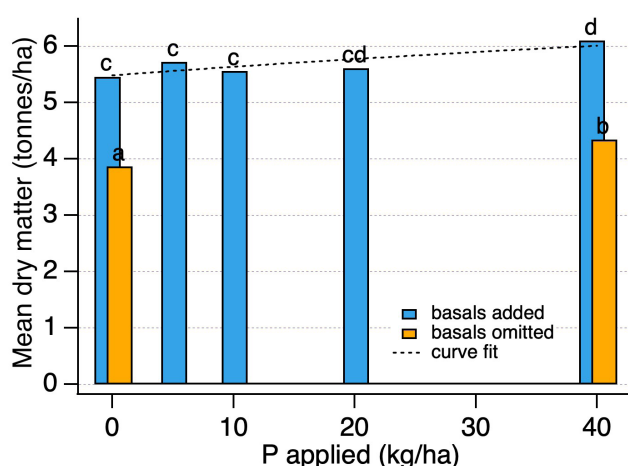
Norton site

Key findings

The Norton trial showed a slight pasture response to P application but only at the highest P rate of 40 kilograms per hectare (kg/ha) (blue bars below).

The national data predicted that there would be very little response to P at this site because of the high P fertility index (1.79). The small pasture response to P (about 5 per cent) at the highest P rate of 40 kg/ha would not provide a good return on investment for farmers.

There was a significant increase in pasture production with the addition of basal nutrients (nitrogen, potassium, sulphur, and some trace elements, shown by blue bars) compared to treatments without basal nutrients (orange bars).



Key learnings

“It is important for farmers to consider the economic benefits of applying different nutrients. Although there was a slight response to P at the highest rate of 40 kg/ha it would not have been economical, and P leaching risk would be high because of the low soil PBI.

“Soil testing and addressing limiting nutrients is the best way to increase production and minimise impacts to the environment.” – David Weaver, Principal Research Scientist, Department of Primary Industries and Regional Development

“We learnt that we were pretty much guessing what we were putting on our pastures and that we need to apply the right nutrients to our soils rather than a blanket cover. The benefits of putting on the correct nutrient applications will increase your bottom line, and profit margins. We are growing more feed at a lower cost.” – Jarrad Norton

More information

This trial was among 52 trials established over four years across south-west WA. Together, the results from the trials validated that national critical soil test values for P are relevant to south-west WA soils and contemporary pasture species.

Learn more at estuaries.dwer.wa.gov.au/uptake