

## VERMICULTURE

## THE WAY OF THE FUTURE

## WORDS JACINTA ALLAN-GANGE PHOTOGRAPHY ALASTAIR EAGLE

A passionate belief in the humble earthworm as the future powerhouse of sustainable mainstream agriculture, is taking Brendon and Del Price on quite a ride.

After 20 years of perseverance, their faith is now finally driving success in the form of their rapidly-growing Mildura-based national business, Australian Vermiculture. But the journey hasn't always been easy.

"We are still a relatively small operation - there are a few of us wearing many hats," Brendon says. "But I think we've really got things together at a great time. Products are continuing to kick goals and there is a growing community expectation that all sorts of waste will be managed in a more sustainable way.

"Vermiculture is the answer to closing the loop in providing quality biologically active fertilisers for farming by applying best practice in organic waste management. That's what's amazed me all along - the potential it presents is such a great opportunity for the future, but it really hasn't been developed commercially until now."

Vermicomposting is a waste management method that value adds to traditionally sterile compost by using the biology excreted by the worm. Science is also showing it produces healthier soils, better plant growth, reduced disease and wider environmental gains. Australian Vermiculture (AV) is Mildura-based, but its commercial worm farming operations are at Mount Compass, in South Australia. It's based on more than two kilometres of active worm beds, with billions of worms processing a variety of agricultural, industrial and commercial waste products, generating more than

10,000 tonnes of dry fertiliser and 500,000 litres of liquid fertiliser each year.

The products are being taken up strongly by broadacre, horticulture and viticulture growers as a result of word-of-mouth, crop walks and the company's agronomic support.

Brendon and his wife Del are adamant it's only the tip of the iceberg, although the growth is something Brendon could only dream about when he first found his way into vermiculture 20 years ago.

"I grew up in Broken Hill and I was working for a Federally-funded employment service and looking at business and employment opportunities beyond mining," he says.

"Thinking about open cut holes left from mining and the problems with organic waste management in large cities, I started looking at organic waste as a potential business and I began experimenting with composting and worms.

"I really just got hooked on these incredible little creatures and what they can do. They're second to humans in their ability to adapt to their environment and in optimal conditions they breed at a rate of 49 times their mass volume every 21 days.

"I was blown away by the potential. I couldn't believe how real and practical it was and that no one was following it through in a commercial sense."

Despite the potential, the organisation Brendon was working for shut down the project.

"They were happy for me to take what I had developed, so I went

## milduraliving | local producer





off and basically put everything on the line to give it a go," Brendon says.

"So much so that when my first shipment of eight big bags of worms arrived to get the business started I actually rolled out my swag and slept on them the first night!"

Brendon says what followed and still continues today is ongoing research and development.

"I concentrated on growing the worm stocks and built the business from selling the end product," he says. "I started, basically, with a shovel and a pitchfork, so it was a big day when I went to having a loader and water wagon to do the manual work.

Brendon says although soil health was a relatively new consideration in farming at the time, product integrity through developing vermiculture techniques was a primary focus.

A breakthrough came at a Soil Food Web Institute event in 2004, which brought together 16 "composters" from across Australia to work with leading international soil scientist Dr Elaine Ingham. A sample of AV's vermicompost was accidentally added to the samples to be tested.

"Dr Ingham put the sample forward as being the only one to contain a diverse range of living microorganisms making it beneficial to soil health, which assured me there was a real opportunity to move forward," Brendon says.

While Brendon wasn't short of ideas and passion, he credits Del's business acumen and dedication as a major part in moving the business forward. Del is now as passionate about vermiculture as Brendon.





"We spent a year having a long-distance relationship, then Brendon asked me if I'd move to Broken Hill," Del says.

"I'm a beach girl from Sydney's eastern suburbs and I realise now how disconnected I was from how food is grown. I think nowadays more consumers are wanting to understand how their food is grown and to be part of something that feels to be making a difference is extremely worthwhile.

A partnership with the Broken Hill City Council saw AV become the first in New South Wales to facilitate a kerbside green bin collection, allowing Australian Vermiculture to demonstrate the concept could work at a commercial level.

"Big horticultural companies took us on and they got great results meaning we could expand to the point we had about nine people working for us at Broken Hill," Brendon says.

A move to Mildura three years ago allowed AV to be geographically central to its markets and fostered a move into broadacre agriculture.

THIS PAGE - A partnership with the Broken Hill City Council saw AV become the first in New South Wales to facilitate a kerbside green bin collection, allowing Australian Vermiculture to demonstrate the concept could work at a commercial level.

OPPOSITE PAGE:TOP - Del and Brendon are passionate about vermiculture.

BOTTOM - A liquid version of the worm-worked compost came about from a mate Brendon played footy who's an agronomist.

PREVIOUS PAGE - Brendon, Del and Xavier of Australian Vermiculture (AV) which Mildura-based, with its commercial worm farming operations at Mount Compass, SA.



THIS PAGE - although soil health was a relatively new consideration in farming at the time, product integrity through developing vermiculture techniques was a primary focus.

"A liquid version of our worm-worked compost came about from a mate I'd played footy with, Jayson Butcher, who's an agronomist. He was working with Millewa broadacre farming couple, Don and Caz Rankin, who were looking to move away from chemical fertiliser, mainly because of its high cost," Brendon says. "I was playing with developing a liquid fertiliser and a 2000-litre trial at Don and Caz's place gave amazing results," he says.

As a result 60,000 litres of what was affectionately named "The Juice" was applied by a number of growers across the Millewa the following year. Its success drew more farmers on board, many of whom have now shifted entirely to using the product as part of a biological farming program.

"Growers, particularly in marginal areas, are squeezed by the cost of conventional farming systems and this is cheaper, so in many cases it's a commercial decision," Del says.

"But we're also asking farmers to consider changing their mindset. I've learnt so much since coming on board. Looking at soil health and its relationship to plant and human health is really resonating with people, particularly women."

The product range continues to expand, with Australian Vermiculture recently commissioning its own pelletising machine to offer pure worm castings in a more farm friendly form than the raw casting.

"Farmers are finding a massive impact on input costs and they're improving soil health, so it makes sense at a farm level," Brendon says.

"Some of the biggest sceptics are now our biggest fans!" \*