

Beds give complete flexibility



Bernie & Liz Walsh

Yanco
Murrumbidgee Valley

- > Raised beds
- > Surface water, bore water, regional drainage
- > Barley & corn for silage

A complete facelift and lots of hard work was needed to turn Bernie and Liz Walsh's farm into the fantastically well-designed and productive farm it is today. Their management skills are as well-honed as the physical aspects of the business, and all of this combined gives Bernie and Liz the complete flexibility to either tap into a ready made silage market with the Rockdale Feedlot nearby or to take advantage of other marketing opportunities that arise.

Silage and grain production wasn't the plan however, when the Walshes bought the 770 ha dairy property next door to Bernie's parents at Yanco in 1981. Bernie's parents ran a sheep-rice farm and he and Liz redeveloped their new property into another sheep-rice farm.

After several years growing rice, the Walshes found they were continually using excessive water, ranging from 16 to 26 ML/ha on different paddocks. After years of core testing and redevelopment with little success, they did an EM31 survey. At this time, EM31 science was still in its infancy and had not yet become the standard means of testing soil type for irrigation. Finally they got some answers as to why their water use was so high. The EM31 identified significant areas of 'leaky' ground within their rice paddocks – areas previously missed by core testing. From the EM results the Walshes realised they only had two paddocks suitable for rice growing.

At the same time they did a whole farm plan based on a survey map. Bernie tied this in with the information he gained from the EM31 survey to more efficiently design their farm, redeveloping it totally to beds with all paddocks draining to a central point. They have since installed a 50 ML storage.

With better understanding of their soil characteristics and a new layout, the Walshes were then looking for a new crop to replace rice as their main enterprise. They were considering what they could focus on when they were approached by the newly built Rockdale Feedlot, just a few kilometres away, to grow silage.

Location provides opportunity

The close proximity of the farm to the feedlot with its ongoing demand for green chop silage has resulted in the Walshes concentrating mainly on growing both winter (barley) and summer (corn) silage for the feedlot. They now deliver around 15,000 tonnes per year to Rockdale. If the price is right and there is available water, the Walshes prefer to concentrate on their corn silage achieving typical yields between 60 and 70 t/ha.

"Whilst it is a high input crop, the results can be amazing," Bernie said.

Another advantage of growing summer silage like corn is there is less likely to be compaction problems from the use of heavy machinery during harvest as the soils tend to be drier. Winter silage is cut in September when soils tend to be wet and compaction can be a big issue.

Bernie said they generally have a pretty good window of about 15 days at the right moisture content (68–70%) to make silage. The silage is sold as a standing crop and usually only takes Rockdale contractors four to five days to strip the crop and cart it back to the feedlot. Bernie said timelines can be a little tight working around waterings to ensure optimum moisture content whilst ensuring easy paddock trafficability. The Walshes admit sometimes the



price for silage can be lower than some other commodity prices but they are pleased with the water efficiencies achieved, averaging around 9 ML/ha. Given these last few years of reduced allocations, Bernie and Liz shudder to think where they would be under the old layout.

Layout designed for flexibility

The Walshes' entitlement of 1428 ML is supplemented by three spear point bores from which they generally draw another 400 ML. They also have a limited licence for another 400 ML of drainage water from the Murrumbidgee Irrigation district drain that passes through their property and drains to the river nearby. They require 1800 ML to operate at full production and due to reduced water allocations in recent seasons have had to buy in water to finish off their summer cropping program.

The flexibility of their layout proved invaluable in 2007, when allocations were drastically slashed. Normally after corn, the beds are renovated and prepared for corn again the next year. Instead, faced with low allocations and a profile of moisture, Bernie put the whole place down to winter crop, which depending on market influences and available water can be either cut for silage or grown out to grain. If additional water becomes available late in the season, his layout, management and marketing is flexible enough to double up into a suitable summer crop.

Bernie admits irrigating beds with siphons can be quite labour intensive. The Walshes have five children and at times the whole family is out changing siphons but they view this as a positive, and generally the children all love helping out on the farm. That said though,

Bernie is looking forward to the day their system can be more automated.

Bernie is a strong advocate of raised beds and thinks they will play a major role in irrigated agriculture in the future. Bernie cites the versatility that the beds provide as the key to success on his operation.

"I can grow a wide range of both summer and winter crops and can change at a moment's notice depending on market influences and available water."

"Beds provide complete flexibility – with less water allocation, we've got to be able to do more with our water," he said.

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