CONTRACTORS DIGGING FODDER BEET

OVER THE PAST FEW YEARS FODDER
BEET LIFTING HAS MOVED FROM
'DIPPING THE TOE IN THE WATER'
STAGE TO A SERIOUS PART OF MANY
CONTRACTING AND FARMING
OPERATIONS IN THE SOUTH ISLAND.

In this feature we talk with the people behind two contracting businesses that have made a commitment to provide the service.

MCCARTHY CONTRACTING, CANTERBURY

Brothers Robert and Grant McCarthy run McCarthy Contracting from their base in Tai Tapu, near Christchurch.

Robert says they've been messing about with fodder beet over the last five years and bought a trailing lifter last year. They grow 20ha of beet on their own farm and sell it as a harvested crop. They lift it in May and then plant winter wheat.

"We had been harvesting lily bulbs in Rakaia for 15 years and when that work finished we were looking for something else to do over winter.

"Fodder beet is going to fill a gap in the South Island, as some of the maize crops aren't yielding as well. It will also take the place of some of the brassica crops, especially in drylands, where it takes a lot of insecticides to keep pests like aphids and white butterfly under control."

Robert says fodder beet is an open crop and so does need weed-spraying early on but not nearly as much as the pesticides required in some brassica crops.

"At the moment fodder beet seems to be resistant to those pests. This year just rust and mildew has been noticeable."



McCarthy Contracting has been using a Grimme Rootster trailing machine. It harvests six rows at 500mm spacings.

"It came down to dollars and cents. We are not supplying beet factories or harvesting large areas so we can't justify a million dollar machine or even a quarter of a million.

"If there was ever that much demand we'd run two small machines and be harvesting two places at once. We still harvest as much as a self-propelled as it's still a six-row machine."

Robert and Grant chose Grimme as they'd been using their products for more than 20 years, harvesting bulbs and spuds. They bought it new through Landpower.

"Landpower helped set it up and gave good service but we don't need to see them. We've got overseas staff who probably have more experience than anyone here." ROBERT MCCARTHY SAYS HIS SIX-ROW
GRIMME ROOTSTER IS THE RIGHT
SIZED MACHINE FOR THE AMOUNT OF
BEET BEING GROWN IN CANTERBURY.

They chose a new Rootster as a lot of second-hand machines have high hours.

"Most are made for supplying sugar factories and work 24 hours, so we went for a new, smaller machine that we will have for a long time."

They tow the Rootster with a 170hp tractor. Robert says they are only burning 20 litres/hour whereas contractors with bigger tractors are on 40 litres/hour."

The Grimme is fine with rolling country and the driver keeps it on target with GPS guidance.





Much of their work is harvesting beet that is fed as part of a transition. It goes to cows on the dairy platform as they're drying off. Once the cows are transitioned they go onto strip grazing beet and the amount increases up to 75 percent of their diet.

"Sugar beet has the biggest potential as it's higher in dry matter with high yield potentials, and it harvests well and in a load you can cart more dry matter."

Robert says the area planted in beet doubles every year and they will lift hundreds of hectares this year but he has concerns regarding an oversupply of lifters.

"There is about 700 ha of fodder beet in the Darfield district; but we don't know how much will be harvested. It could be none.

"To gear up thinking that you'll harvest big areas is risky, especially going into a year with tight finances. People will take the cheaper option and graze the fodder beet, rather than pay us to lift it."

McCarthy Contracting starts contract lifting in the last week of March and it can go into September. They will harvest the entire crop or do it in sections, whatever the client wants.

Usually Robert and Grant harvest on rain days, as they spend the fine days on silage. If it's too wet to get onto the paddock even with a tracked tractor it doesn't matter as the crop will keep slowly growing until they can get to it.

WALLING CONTRACTING SOUTHLAND

Having just commenced his fourth season of lifting beet you would think that Ben Walling would be something of an expert at the whole process but he says there is still plenty for us to learn.

"No one in New Zealand has done enough with beet to be an expert. I like to talk to people in Europe where beet has been lifted on a large scale for many years to figure out what would best suit our conditions. It is a crop with a great future especially here in Southland, its versatility and ease to feed is terrific and the production lift that our clients have experienced from feeding it speaks for itself."

Ben Walling and Sarah Flintoft own Walling Contracting Southland and imported their Agrifac Big Six harvester four years ago to incorporate beet harvesting into their list of services.

The Agrifac Big Six is a self-propelled, six-

wheel-drive that takes in six rows at a time at 500mm spacings.

"The first thing I was asked overseas was: If I was to buy another silage chopper would it be a trailing one? Of course the answer was no. The same applies with a beet harvester they said. A self-propelled has more capacity and does a better job."

A big reason Ben and Sarah chose this model was the six-wheel drive which means it can handle the wetter going. They say the big physical size of the harvester is quite deceiving. It can handle wet conditions and can carry the beet in the on-board tank and offload across a fence to waiting transport.

"Some of our forward thinking clients were prepared to follow the guidelines and work closely with agronomists to get the best from their beet crops. The results have been more than impressive."

Ben and Sarah have held two demonstration field days with speakers and each day attracted around 200 people.

"It is a crop with vast versatility. If you have the equipment to feed silage then you can feed lifted beet, whether out whole as a bulb in the paddock or chipped and combined into silage for the wintering barn.

"The benefit of adding beet harvesting to our list of services was that it provided winter work. As soon as the silage finishes we are underway with the beet lifting and vice versa."

Ben and Sarah imported their second-hand Agrifac machine through Geoff Wallace, with whom they have had a trusted business relationship since they first starting contracting. They chose Agrifac because they are easy to operate.

Theirs was the only one of its kind in NZ when they imported it and there were no service agents, so it had to be something that Ben could easily get his head around in both an operational and servicing sense.

The sensors on the feelers identify the rows of beets and keep the machine on target. Most of the time it is driven in auto mode but it is changed to manual in tricky paddocks when the ground is a bit rough or the crop is so patchy that the feelers lose track of where they are.

Ben and Sarah also grow 130 ha of nonlifting fodder beet varieties on their own farm at Five Rivers, which this year they will graze near 5000 dairy cows during June and July. They also have 600 bulls hoofing and toothing a recently developed hill block that get fed lifted beets.

"It's a cheap feed, far cheaper than anything else we can grow down here and its high in ME. The stock just love it and they thrive on it."

Most lifters have walking shears that work through the ground and push the beets up and out. These harvest anything in any weather conditions. Ben believes the walking shears are better than an Oppel wheel for NZ conditions.

The Agrifac harvester cleans off the worst of the dirt and stores the beets in the on-board hopper. The hopper will hold 18 to 22 tonnes depending on the dry matter.

The bulbs can be stored for six months or longer if done correctly. The higher the dry matter the longer they will store.

The main problems Ben has encountered when lifting is poor paddock preparation. For example, a grazing variety has been planted, the paddock is too undulating or the rows are unevenly spaced or not planted with a properly calibrated precision drill.

"There are no ifs, buts or maybes – the paddock has to be flat and you can't plant it in a swamp with no access.

BEN WALLING AND SARAH FLINTOFT IMPORTED AN AGRIFAC BIG SIX HARVESTER FOUR YEARS AGO TO ADD BEET HARVESTING TO THE SERVICES THEY PROVIDE TO THEIR SOUTHLAND CLIENTS.



"We try to work within the farmer's requirements but it is easier to harvest the whole paddock at once, which allows the farmer to drill winter barley or wheat straight away."

Nearly all of Walling Contracting's clients wash the beet before feeding.

Ben and Sarah own a Cross Rhino washer and de-stoner. Ben says it did not take long to realise how much better the beet was after it went through the washer rather than fed dirty.

"There has been plenty of conflicting information circulating in NZ about the benefits of washing but our clients have seen it for themselves. The cleaner the beet the more you can feed."

The washer removes stones and rubbish, washes the crop, and leaves only clean beet to be taken to the feed or storage pad.

Farmers who want the beet chopped can hire or buy bins from Walling Contracting.

"Bins hold five tonnes of beet. They have a rotor on the bottom that chews away at the beet and cuts it right down to inch or smaller size bits, which can be easily mixed in with the silage."

Ben says in Europe sugar beet is used as a fuel for bio-digesters that produce power and in the US beet is being grown as an ethanol source. Here, most clients are dairy farmers but beet is also fed to deer, especially in spring to velvet stags, as well as sheep and beef animals.

He is concerned that the potential of beet is being oversold, however. He says it has been estimated that there is now about 40,000 ha



of beet grown in NZ. Most of it is grazed but even if half of it was lifted that would mean only 20 self-propelled machines would be needed in NZ.

Ben has heard there are now some 30 selfpropelled or trailing harvesters already here. Like Robert McCarthy, he believes there is a risk of too many coming on board.

"With all the machines there is going to be pressure on people to cut corners and cut prices and everyone gets burnt. The same thing happened with maize and even baled silage for a while, then they went back to doing it properly and the industry has grown from there.

"Beet will go through the same cycle if con-

tractors and farmers are not careful."

Ben is happy to talk with anyone considering getting an Agrifac or other brand of lifter.

Walling Contracting Southland runs 15 tractors. It's an all year operation and fodder beet is a tiny part of it.

"There's not a lot of money in it as a contractor but I got involved as it interested me. It provides another service for clients and gives a bit more winter work to keep the full-timers busy over the otherwise off season."

Precision planting the beet is an important aspect of growing a successful crop that can be lifted easily. Ben plants in September but it's often later as the ground temperature needs to be rising. **RC**



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