Can livestock and no-till cropping co-exist?

Through the Northern Victoria Grain & Graze 2 program, a project looking at combining no-till farming with a livestock enterprise is occurring across northern Victoria. The project aims to identify strategies being used by growers to maintain the integrity of their no-till system, while incorporating a grazing enterprise into their farm business.

Mallee, Wimmera and north west Victorian farm consultants interviewed for this project agree that livestock can co-exist with a no-till cropping system, but not without compromise.

According to the consultants, a number of factors must be considered by no-till grain growers before they can confidently determine whether adding a livestock enterprise to their farm business is the best option for them.

History

During the 1990s many farmers moved out of livestock and focused increasingly on cropping. This change was due largely to a drop in wool prices and improved returns from grain production.

The trend away from livestock strength ended as grain growers transitioned to no-till farming. It was widely believed that no-till and livestock were not compatible.

Initially, farmers were motivated to adopt a no-till cropping system because it offered a means to improve soil structure and its water holding capacity, as well as the timeliness of sowing.

Further benefits from no-till were seen as coming from full stubble retention. For many, the system seemed to be at odds with the integration of a livestock enterprise, which growers viewed as having a negative impact on soil structure, ground cover and possible nutrient redistribution.

Yet, despite the concerns, in recent years there has been a renewed interest in livestock, driven largely by a strengthened meat market coupled with rising input costs, increased climate variability and weakening grain prices.

But the question still remains. How do animals fit into a no-till operation? A mixed enterprise

How well or easily livestock can fit into a no-till operation depends on individual needs and wants, the productive capacity of the land, the farm’s sensitivity to soil damage from grazing and trampling and the grower’s level of interest in livestock.

Not all farmers and farms are the same. Interest in livestock varies markedly and is usually determined by history, past experience, and personal inclination.

Consultant observations suggest that if the land can support livestock and the grower is genuinely interested in running stock, it is certainly possible to run a livestock enterprise in conjunction with a no-till cropping operation.

Considerations

According to Wimmera agronomist Andrew Newall, growers have tough decisions to make when running livestock.

“It can certainly affect the time of spraying,” he said.
"But it also might mean you don’t have to spray certain paddocks at all."

As always the case, there are pros and cons to running stock in a no-till enterprise.

Commonly voiced challenges include soil erosion and compaction, weed seed burial and transport, the cost of re-entering into livestock, and the extra workload.

Taking these challenges into account, why would you run stock? There are some clearly-defined benefits.

A livestock enterprise can contribute to increased profit from the cropping enterprise, resulting indirectly from stubble reduction, fewer soil borne diseases, greater flexibility in weed control and reduced risk from price variation and poor seasons.

As well as providing an alternative means to manage weeds, livestock can also contribute to nutrient cycling and increased biological activity in the soil.

Trade offs

While observing that there are certainly benefits for including livestock in no-till businesses, the farm consultants also concede a range of challenges.

The decision to include livestock in the farm business comes down essentially to the farm operator’s willingness to run a mixed enterprise. The consultants concurred that those with a genuine interest in livestock will be better placed to reap any rewards.

The advice was, if you’re willing to put in the work, your farming business could certainly benefit from having a diversified income as well as the ability to spread risk, particularly in years of low rainfall.

However, Maiden Gully consultant Andrew Bissett stressed that running stock can affect the time of sowing.

“Growers need to ask themselves if they are willing to make that compromise,” he said.

Making it work

To make a livestock enterprise work, the same attention to detail is required as in cropping.

With good planning the two can co-exist. Practices such as rotational grazing and confinement feeding are management tools that some mixed farms are using with success.

The challenge is to increase the positives of running stock while minimising the negative aspects.

The consultants said that with its higher input costs and greater risks, the cropping system must take priority, but that, with good planning, it is possible to combine the two.

Those already running stock say the benefits far outweigh the challenges, but the opposite view is held by those not running stock.

Personal preference, labour availability and the intricacies of the farm system will influence the decision.

Alistair Murdoch from Kooloonong said only the farmer can weigh up the challenges and benefits and make the best decision for his or her farm.

“Growers have different strengths and if one of them is managing livestock, then we should support them in that,” he said.