

10 opportunities to manipulate your farm environment

We should be consistently looking for opportunities and improvements in our farm system and environment. This is even more critical under the current economic and climatic challenges we face on the farm today. All farms we go to have countless opportunities to manipulate the environment to be more efficient and to future proof the property for tomorrow's challenges. Below outlines some opportunities that we could be doing.

1. Minimise nutrient wastage

For a lot of farms the efficiency of your fertiliser dollar spent is still an area where advances can be made. It is important to have nutrient target levels and your fertiliser rep is a good place to discuss these. It is critical to have individual nutrient management areas of the property that take account of the differing land resources, stocking rates, stock type and management for the block, and with a nutrient budget for each block. Gone are the days of one nutrient budget for the farm and blanket fertiliser applications.

2. Increase pasture utilisation of the hill country

At this time of year those areas with very poor pasture utilisation are pretty obvious. There are a couple of ways to manipulate grazing patterns apart from fencing. Opportunities include strategic planting of shade trees higher up the slope or the provision of water to draw stock up. The provision of water can be a difficult one but often this can be achieved through tapping of springs with horizontal bores.

3. Enhance water quality

Cattle, particularly during low flows in summer can have a huge impact on water quality. The provision of alternative water will increase stock performance and greatly reduce the stock impact on water quality. Exclusion of cattle or livestock with fencing would further increase this but often this is impractical.

4. Reduce pugging and treading damage

The effects from pugging and treading damage can be horrendous. Research has shown pasture production can be reduced by 50+% from a single pugging event and take up to six months to recover. Further to this, clover N-fixation can be reduced by 60-80% and tiller density dramatically reduced. This is something that is within your control and can be avoided most of the time!

One way to reduce the incidence of pugging is to know your land resources, and for those soils which are more prone to pugging consider cleaning them up in the late summer/autumn rather than waiting till the winter when they are wet.

5. Use poplars to manipulate soil pH and drainage

Research has shown that poplars over time will increase soil pH. They are renowned for drying out wet soils and will provide stability in gully systems.

6. Reduced nutrients entering waterways

As environmental pressures increase on farming, wetlands and swampy gullies will play an important role to reduce nutrient leakage. They trap nutrient and sediment runoff, providing valuable filtering benefits to farm stock water and the down stream users. They are also nature's sponge capturing large amounts of water in a storm event and slowly releasing it over a longer period of time reducing the large volumes of water running down gullies, through culverts and into streams which helps to protect farm infrastructure.

7. Drought proofing

We are still feeling the effects of the 2008 drought and in many eastern parts this year has been dry again. But as we drive around the country side it seems very few farmers are utilising a feed source they have growing in erosion control plantings (poplars and willows) or even planting fodder blocks for future droughts. The feed quality of poplars and willows is better than lucerne hay and these species coppice.

8. Shelterbelts

Developing an effective shelterbelt can provide protection from both cold and hot weather conditions and increase production in both livestock and crops. Research has shown that dry matter productions can increase up to 40% with adequate shelter. Shelter also reduces livestock stress, enhances metabolic conversion of feed, and consequently better weight gains.

9. Feed budgeting

If you are not feed budgeting how can you have your finger on the pulse? Feed budgeting enables you to objectively match pasture supply and demand on your whole farm during the year. By budgeting it is easier to achieve livestock targets and maximize production and profit. It also allows you to make decisions one to three weeks ahead of farmers that don't feed budget and take advantage of the market/schedule. This could be the difference between having a poor year or an average year.

10. Storm proofing

Research commissioned by Federated Farmers in the Rangitikei-Wanganui hill country after the 1992 winter showed that adequately space planted trees reduced erosion by 62%, whilst closed canopy exotic forestry or scrub reduced erosion by 95%. The average cost of this winter with livestock losses, disrupted fences and tracks, and not to mention the difficulty of management was in the order of \$60-70K per farm. Convert this into 2009 figures and it would be hundreds of thousands of dollars. Since the 1992 winter we have had three or four big storm events but as an industry we consistently do very little. Properties can easily be "storm proofed" by doing a little planting each year, or even just keeping the track water tables and culverts cleared.

So, how many of these opportunities is your farm business realising at the moment, and is there one or two more things that you could be doing smarter this winter/spring that will put more dollars in the back pocket? Every small change makes a difference, and cumulatively it can provide some dramatic results over time. Challenge yourself to grasp some of these opportunities on your farm this year.

Want some help, or know more, contact Lachie or Sarah at landvision@gmail.com.