Grain Storage - Risk or Reward?

Since deregulation arrived the marketing of the grain has become a really hot topic. Many farmers are excited at the prospect of maximising profits from their own product and some are considering storing and selling their own grain with the facilities to value add by blending or grading.

However historically most grain stored on farm in WA has been for feed or seed so any loss of quality or germination energy has been accepted as part of the risks of farming.

But once you hold your own grain for sale off the farm you also accept the risk – this is the risk you have handed to CBH for so many years. The projected rewards are going to hinge on investment in infrastructure and your ability to deliver to customer's specifications. The opportunity cost is very high if you get it wrong.

A huge amount of money is invested in growing the stuff and that money is outlaid in hope – hope the rain and weather will be kind and there will be a good yield to justify the huge outlay!

But once the grain is harvested and you know the quality and quantity that's where you have a direct influence on the environment that grain is kept in, it's not weather dependant.

But this also a part of the business investment where I see compromises made and lowest price syndrome being applied which is not necessarily applied when purchasing the latest harvester!

This is now a stop loss operation, so the equipment you invest in has to be good enough to be sure you prevent loss of quality so you can offer grain for sale to the widest range of markets.

This is also the part of the business where serious losses can and do occur. Management of farm stored grain is sometimes referred to as 'crisis management' trying to find a solution when things start to go wrong! The grain is loaded below 12% but when you get around to checking it March you find water in the headspace. Water liberated from the grain by insects does the most damage and then the moulds become active and also create more water and heat which insects love!

The big question is can I control the grain quality and the weevils and make profits? The answer is yes with the right equipment and good management.

- 1. The most important management technique is good hygiene remove sources of food and shelter for weevils outside the silo and they die out. They evolved to survive in a protected environment where there is a reliable food supply and they can't survive in the field. If you find them outside the silo they will always be under a bag or piece of wood or sheet of tin and even under the bark of trees. So a pile of grain is paradise for weevils!
- 2. To be sure of a good outturn load only grain at the right moisture content for long term storage if no aeration fitted it must be below 12% and up to 15% with aeration. However close to 12% in a large silo is also risky and moisture migration to the headspace needs to be monitored. If it wouldn't be accepted by the central system then it may also cause problems in your own storage. Large amounts of weed seeds are going to limit your market opportunities and radish can cause germination problems.
- 3. If you are using your silos for harvest management then aeration is a valuable tool to be able to handle over moisture loads. Aeration will control grain temperature and preserve grain quality but is also great for managing grain insects but will not eliminate them. Sealing will enable you to eliminate

insects inside the silo using a fumigant gas – these are not optional extras if you are going to trade grain in all markets and the larger the silo the more important it becomes for a successful outturn.

- 4. Timing is important when controlling insects don't wait until you see them. By the time they become visible in the grain they have reached a density of 1-2000 per tonne! Fumigate when you lock up the silo after harvest or aerate to stabilise the temperature and then fumigate.
- 5. Keep your eye on your investment know what is going on inside the silo. Spear and sieve it and install pitfall traps

If you are planning to store your own grain please give me a call so that I can offer some advice and contacts so you can shop around for the best deal.

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