

## The fallow – one of the busiest times on the farm

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*While your land has a break from growing cane, you have an ideal opportunity to undertake many farm operations which are not possible during the normal growing period. Make the most of the opportunities which the fallow offers you to set your farm up for high-yielding profitable cane crops in the years to come.*

### Critical components of the fallow

- Free of all living sugar cane to break disease cycles
- Take the opportunity to reduce the weed seed bank
- Manage any potential erosion risk
- Increase organic matter and nutrition by planting legumes
- Reconsider whole farm layout, drainage and irrigation system design

### Why use a fallow crop

The aim of every good fallow is to break weed and disease cycles and prepare the land for the coming cane crop. The fallow is a good time to add nutrients, such as lime, and undertake drainage and land-levelling works.

As the fallow occurs during the wet season it is important that the fallow land is protected from erosion as much as possible. This is best achieved through having a soil cover in the form of a crop or trash blanket. The fallow needs to be free from living cane plants which can harbour pest and diseases.

### The benefits of using a fallow

A well-managed fallow will improve both the soil biology and soil structure and should increase yields from the following plant and ratoon crops. Works carried out during the fallow can improve drainage, irrigation systems and farm layouts.

### Jobs to consider during the fallow

1. **Take a soil test** – Soil tests are best taken at the start of the fallow to allow time for soil ameliorants such as lime or gypsum to be added before the fallow legume crops are planted.
2. **Undertake earthworks in and around the block** – The fallow is the only opportunity you have to undertake land leveling operations in the block. In many cases, grassed headlands and waterways will have captured silt which has washed out of the block. These headlands and drains need to be lowered and cleaned out and the fallow is the perfect opportunity.
3. **Manage soakage areas** – In some blocks, the installation of slotted underground drainage pipes could improve yield by removing excess ground water.
4. **Amalgamate and realign blocks** – Harvesting and farming efficiency is improved by increasing row length and the quality of on-farm roads and tracks.
5. **Upgrade irrigation systems** – Many irrigation system upgrades require more underground pipeworks or earthworks which is only possible during the fallow.
6. **Manage the weed seed bank** – The fallow should be kept free of weeds to reduce weed seed set and lower the weed seed bank.
7. **Control problematic weeds** – Weeds such as nut grass are best controlled during the fallow when a wider range of control options can be used than is normally available.
8. **Manage cane pests and diseases** – To break disease cycles, cane blocks need to be kept free of living sugar cane plants during the fallow. Living cane plants allow pests to survive over the fallow and reinfest the new plant cane crop.
9. **Manage erosion risk** – The movement of sediment is one of the major contributors to reduced water quality. Block design needs to incorporate erosion management structures such as grassed waterways and contour banks.
10. **Plant a fallow legume crop** – The preferred option of fallow management is to plant soybeans or other legume crops into either a sprayed out or cultivated fallow. This is an ideal way of improving both the biology and the structure of the soil, reducing erosion potential from the block while adding nitrogen to the soil.