

Photos from the Endersby Farm Cambrai

These following pictures are (largely) "before & after" photos of our farm at Cambrai. Each photo with a number (eg 2) followed by a letter (eg 2c) is one of a series of photos, generally taken from the same location and in the same direction; but in different years.

The soil and soil profile is essentially the same as that at Moorunde - so each photo sequence is an example of what can be achieved.

Note the change in the topsoil colour in the "before" photos (eg. Figures 1a & 2a) to that of the "after" photos (eg. 1c & 2c) photos.



Figure 1a - March 1989.



Figure 1b - August 1995.



Figure 1c - July 2014.

Figures 1a, 1b & 1c were all taken from the same location with the same view direction - in different years.

Note the change in the topsoil colour.

Note the ripping in Figure 1b that can no longer be seen in Figure 1c.



Figure 2a - March 1989.

We started with rocks and bare ground...



Figure 2b - December 1998.

... and turned it into scrubland.



Figure 2c - July 2014.

Figures 2a, 2b & 2c were all taken from the same location with the same view direction - in different years.



Figure 3 - This illustrates that the "soil profile" is the same as that at Moorunde and an area from which Spear Grass was harvested to sow into paddocks No. 2 and 3. Similarly for Figures 4 and 5.

Handfuls of grass stems were scythed when nearly ripe then stored in drums. Later they were taken and shaken out while walking over cultivated ground (after sowing barley/medic etc). However the Spear Grass did not germinate until the second year. This was a hard way to do it! Later I thought up using the chaff cutter to process the seed for sowing mechanically.



Figure 4 - I know how to grow Spear Grass even with my property stocked with sheep!



Figure 5 - Spear grass re-established on a stony ridge despite the property being stocked with sheep. I maintain a surplus that enables me to harvest the seed!



Figure 6 - June 1990. Paddock No. 1.



Figure 7 - June 1990. Paddock No. 1.



Figure 8a - June 1990.



Figure 8b - August 1995.



Figure 9a - June 1991. Paddock No. 3.



Figure 9b - October 1992. Paddock No. 3.



Figure 9c - July 2014. Paddock No. 3.

Figures 9a, 9b & 9c are from the same paddock but different locations and different view directions.

This paddock was cultivated in 1991 and sown down to barley (as a "cover crop" & starting feed), Persian clover, vetch, medic and Spear Grass.

Method of Sowing Spear Grass at "That Time" was to cut stems with a scythe when the seed was nearly ripe, then at sowing time take handfuls of stems and "shake south the seed" while walking over paddocks freshly cultivated. (Note - no germination on the first year for Spear Grass)

Note - "dotted" through the whole scene in Figure 9c are the remnants of "last years" tussocks of Spear Grass (2013) with darker areas of green being fresh (July 2014) Spear Grass.

Areas like this enabled me to hold on to my breeding ewes through the 2002 drought.



Figure 10a - June 1989. Paddock No. 2.



Figure 10b - October 1992. Paddock No. 2.



Figure 10c - July 2014. Paddock No. 2. The stony ridge in the background and left of the "stobie pole" has a good stand of Spear Grass and medic. The stones are gradually being reburied to the point where you can no longer see them from where the photo was taken - but it was nothing but stone when we arrived in 1988 * In this area I used the "chaff cutter and rolling barrel" technique to establish Spear Grass and medic.



Figure 10d - July 2014. Paddock No. 2.



Figure 10e - July 2014. Paddock No. 2.

Figures 10a, 10b, 10c, 10d & 10e are from the same paddock but different locations and different view directions.

This paddock was cultivated in 1990 and sown down to barley and lucerne (to use "tap root" to break hardpan, even though the district is too dry for lucerne to survive past one year). Then cultivated again in 1992 and sown down to barley (as a "cover crop" & starting feed), Persian clover, vetch, medic and Spear Grass.

Note the "Seeding Stems" from last year (2013) in Figures 10d & 10e. The darker areas, more obvious in Figure 10d are fresh Spear Grass blades.

These areas enabled me to keep my breeding ewes through the 2002 drought.

Now look at Paddock No. 2 three months later (October 2014) in Figures 10f, 10g, 10h & 10i.



Figure 10f - October 2014. Paddock No. 2.



Figure 10g - October 2014. Paddock No. 2.



Figure 10h - October 2014. Paddock No. 2.



Figure 10i - October 2014. Paddock No. 2.

- The areas shown in Figures 11, 12 and 13 on the following pages show how "barren and stony" most of the farm looked like when we started (also look back to Figures 1a, 2a and 8a).
- These areas (smaller than Paddocks 1, 2 & 3) were "direct sown" to medic.
- These areas are to the east of the larger Paddocks No. 2 and 3 and westerly winds blew Spear Grass seed from the Paddocks into these smaller areas. The Spear Grass has now "volunteered " over much of these areas. See figures 14 & 15.



Figure 11a - June 1989.



Figure 11b - August 1995.



Figure 12a - June 1989. Barley stubble from the last crop (1988) is the vegetation in the paddock to the left of the fence.



Figure 12b - August 1995.



Figure 13a - June 1989.



Figure 13b - August 1995.



Figure 14 - July 2014. "Volunteer" Spear Grass found in the small paddocks of Figures 11, 12 & 13. Prior to our arrival in October 1988, these smaller paddocks were not cropped but were overstocked with goats and horses - to the point where the trees seen in the backgrounds of Figures 11, 12 & 13 were having their bark eaten.



Figure 15 - July 2014. "Volunteer" Spear Grass found in the small paddocks of Figures 11, 12 & 13. No fertilisers have been applied to these areas, hence the presence and pale colour of the "sour-sob".



Figure 16a - June 1990. About eight months after arriving in Cambrai and "not a blade of grass on the farm".

But I "turned things around" after careful planning and hard work...



Figure 16b - August 1995.



Figure 16c - July 2014. The tall tree at the right is the tree seen in the centre of Figure 16a and at the right edge of Figure 16b. The other trees (to the left of the tall tree) are seedlings in Figure 16b.

In 1988 we had purchased a barren wasteland; but within seven years had turned it into good pasture land with Spear Grass as a major component.

We had also turned a scolded claypan back into scrubland with a moss & lichen duricrust - as seen in Figures 1 and 2.

The only time fertiliser was used was when establishing the medic and on small areas set aside to grow hay; that had the rocks "swept off" by my "sweeper" - see Figure 17.



Figure 17 - My "stone sweeper".

The Farm History - From 1972 to 1988 (history not known prior to 1972) the larger paddocks (No.s 1, 2 & 3) were continually cropped every year. The soil had been seriously "hard panned" and "stone uplift" was already a problem - see Figures 1, 2, 6, 7, 8 & 13.

To grow a small area of hay, I made a "stone sweeper" for clearing stones to enable the hay to be cut. However, for the pasture areas (the majority of the farm) I applied the principals of "Lithic Mulching", making use of the stone which has now been mostly buried with the subsequent build up in soil and organic matter! i.e. compare Figure 13a with 13b and Figures 1a & 2a with 1b & 2b.