

“It works so well that it can hardly be true”. Experiences from heavy and highly variable

Jan Jönsson

Manager, Lydinge Farm, Bjuv, Skåne, Sweden, E-mail: lydinge@gmail.com,

PRACTICING CTF SINCE 2006

Lydinge is situated in the very south of Sweden. We have a maritime climate with an average rainfall of 650-800 mm.

The land we farm is mainly clay with islands of sand either on top of or as layers in the clay.

Lydinge has always been considered difficult to farm. The previous owners have tried different ways of farming. The plow and numerous types of heavy discs and rollers have tried to force their way forward in attempts to break up, turn around and crush the clay so that the drills would be able to do their job. At this time the surface used to look like crushed gravel and underneath.....

So sometimes in the middle of October, a couple of weeks and rains later, all of the field turned green not only from wheat but also from emerged black grass. It's hard to be successful with the spraying when it's getting late.

During the winter we very often had large areas that were flooded and consequently nothing grew.

The current owner who also was the neighbour of Lydinge before buying the farm tried to continue with plow and heavy equipment fx Vaderstad Rexius twin, but we never got satisfied with it.

So, during 1998-1999 we got to the point where we felt that something had to be changed in order to continue. We started to use a cultivator instead of plowing and immediately felt that we were going in the right direction.

However, we ended up with very dry topsoil after having done a couple of cultivations in order to "get the job done". It still took a lot of hours and we needed a lot of nice days in order to get the field prepared for the next crop.

Next step would be to get a wider cultivator and a more powerful tractor.... At this time, in 2005 we read an article about CTF for the first time. The article described a lot of benefits that one could expect from just staying in the same tracks. I must admit that I didn't quite believe that it would be possible to achieve the same results at Lydinge.

We looked for obstacles not solutions. But we couldn't really get rid of the thought without trying.

WHY 8 M MODULES?

Choosing 8 m was the cheapest way to find out if CTF would be the way to go and some existing equipment was at least 8 m or 24 m wide.

We found that a Horsch Terrano FG would probably be a good choice and we were looking for an 8 m wide one. We found a ten meter one, or actually 9.5 m, where we took the outer sections of, left us a full 8 m cultivator. The machine came with a tow bar fitted that we later reinforced so that it could pull an 8.20 m Vaderstad Carrier, this way we got as much work done in one pass, so that a mulch seeder would be able to do the remaining work.

In 2008 we bought a Horsch Airseeder CO 8 m wide.

After practicing CTF for three seasons we were convinced that this was the way to continue.

The benefits of CTF had already proven themselves to come true, less labor, fuel consumption and the best of all; improvements of a better soil structure could clearly be identified.

Seeing improvements in the soil structure opened up for ideas about how to take advantage of these new possibilities. After having done a scanning of the whole farm producing a very accurate soil map we started to make prescription files for fertilizer spreader and drill. This way we could handle the variations in clay content concerning nutrients and the amount of seeds we planted in order to get the amount of emerged seeds per m² that we really wanted. This together with faster and more even emergence has improved our chance to make a successful pre- and post emergence spraying. By increasing competitiveness from the crop we made it harder for weeds such as black grass to cause any trouble.

A lot of straw after a good crop of wheat can be difficult to handle while wanting to establish a nice stand of canola. This problem we think we have solved by removing every other shank on the air seeder. This way we can use it as a strip till seeder placing the fertilizer below surface and drop the oilseed right in front of the rear support wheel.

8, 9 OR 12 M

Harvesting with a 9 m platform didn't really feel right and moving almost all of the tracks to get a 9 m system felt wrong as well. Instead are we looking into moving to a 12 m CTF system. This way we can use our existing tracks and take two away and add one. This on the other hand will become a very expensive transition unless we at the same time move towards a No- or Min till system.

We have the last two seasons tried to practice Min till on a couple of fields and it has turned out very well. Some fields still have some time to go before they are ready for such a change mainly because they still suffer from compaction and drainage problems.

Certain areas suffer from compaction below the earlier plow pan, and have very clean and nice drain lines underneath. Here we can only wait for very dry summers that can increase infiltration capabilities so that worms and deep rooting can maintain the structure. Deep tillage in these areas can help but it won't last unless worms and roots find their way through the pans.

A problem that seems to appear after practicing min-till in some fields is to avoid the tracks from getting deep in some places. Here we have to come up with some type of "earth mover" that we can fit in front of a tractor.

Even if there is still much work left to do, we were not able to continue the way we did before moving to CTF. CTF has shown us whole new opportunities for working with heavy and difficult farmland.

After trying min- and no till and seeing what the soil can handle on its own, given the right chance (CTF), I can only agree with the statement:

Less is more.

