

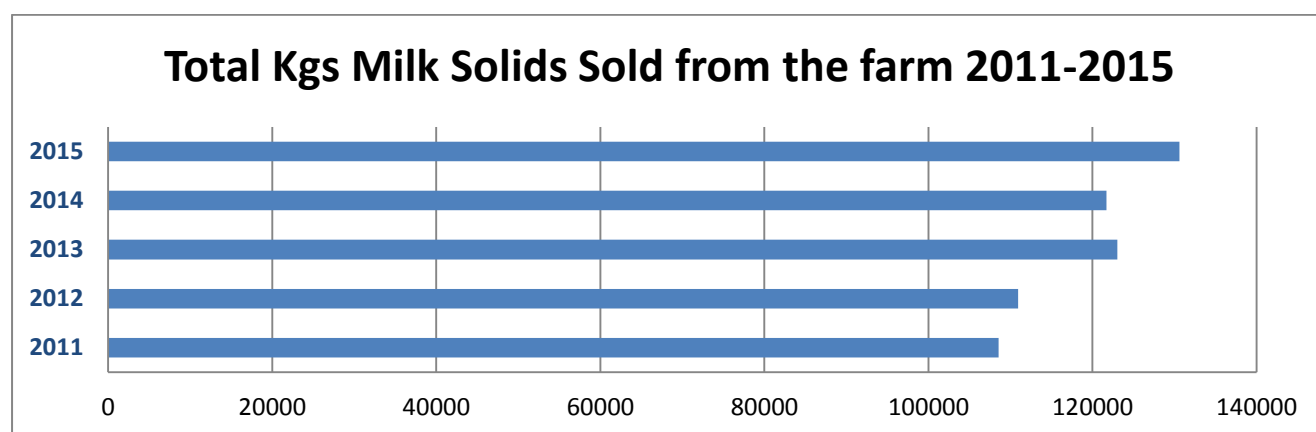
## Milk Production on Greenfield Dairy Farm

**Table 1. Milk Production Details Greenfield Dairy Farm.**

	2011	2012	2013	2014	2015
Milk Price(c/l)	38	36	41	42	35
Total Yield Sold(litres)	1328654	1316477	1469612	1413359	1490829
Yield /cow(litres)	4504	4478	4593	4604	4545
Milk Solids/cow	368	377	385	396	398
Milk Solids/Ha	962	982	1090	1078	1088
Cows milked at peak	295	294	320	307	328
Area for grazing(Ha)	112.9	112.9	112.9	120	120

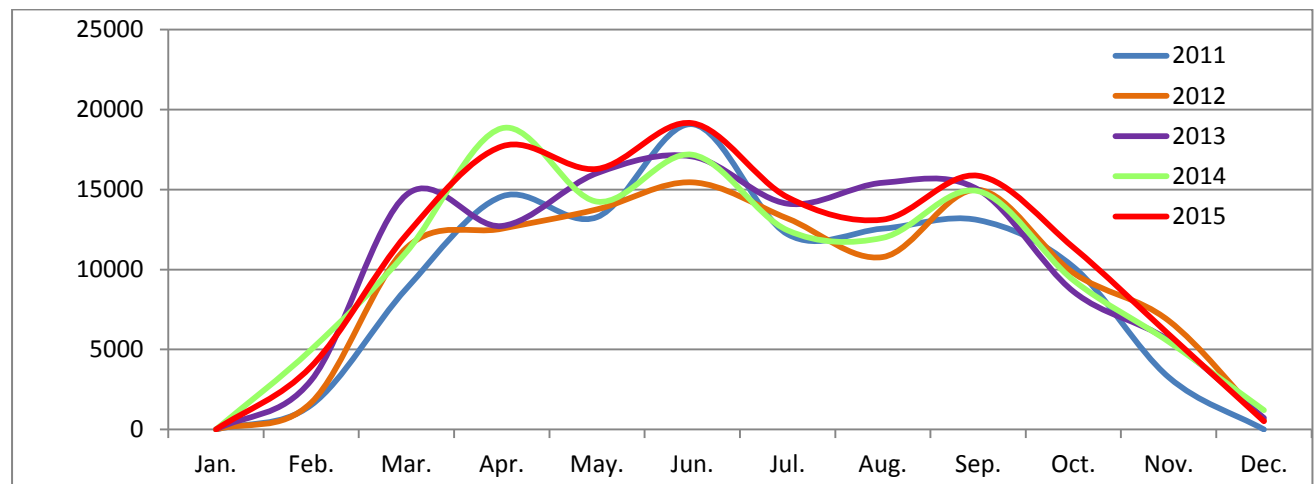
Table 1 highlights the milk production on the Greenfield Dairy Farm since 2011. It does not include milk fed to calves. Milk fed to calves is approximately 25kgs/cow. The yield per cow is increasing each year. Extra land (7ha) was leased in 2014. There are extra cows been milked each year on the farm. On this farm the objective is to achieve high milk solids production per hectare. This is the key driver of profit now that quotas are gone. It is also one our Key Performance Indicators on the farm. But we also keep an eye on production per cow.

**Graph 1. Kgs of milk solids sold from the farm**



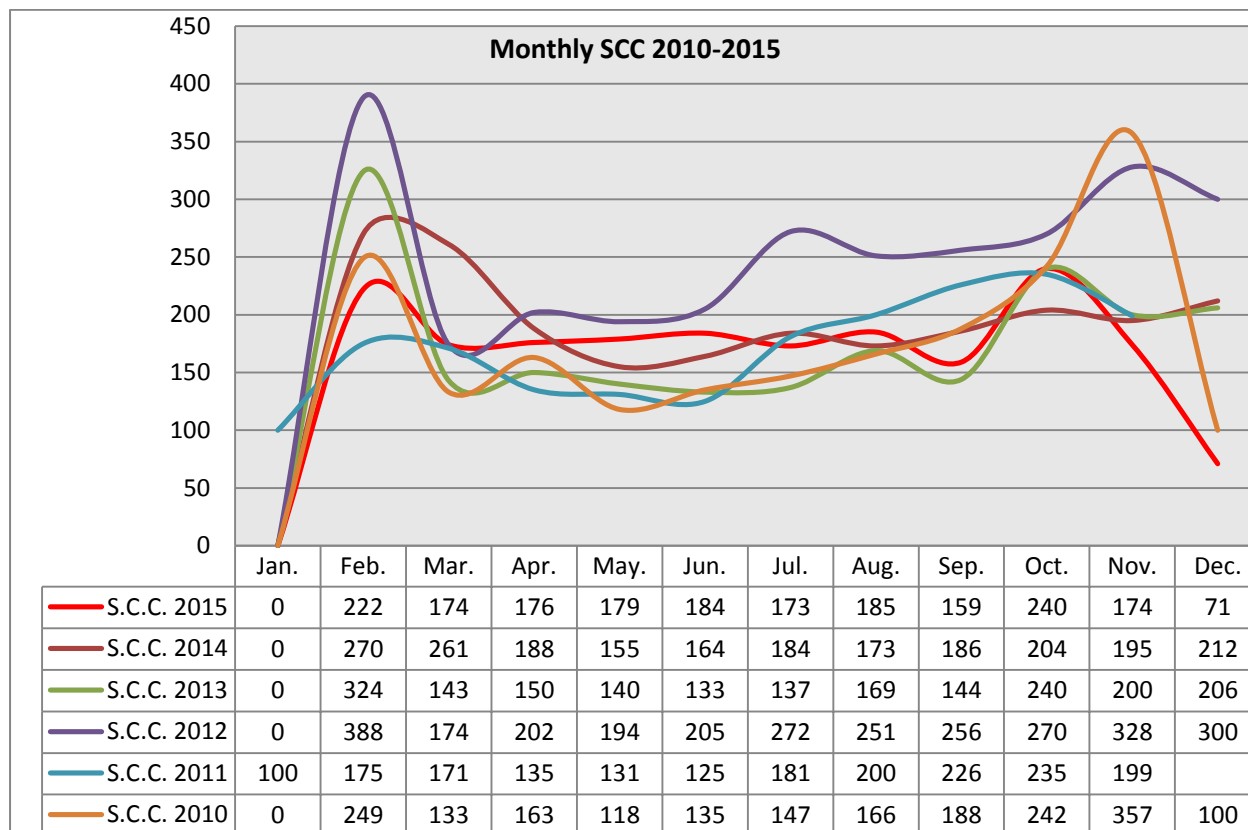
The total milk solids sold from the farm has increased. It was slightly lower in 2014 as we milked less cows. In 2015, the farm sold **131 tonnes** of milk solids. This was an increase of **22 tonnes** since 2011.

**Graph 1. Kgs of milk solids sold from the farm**



Graph 1 shows the milk solids sold per month. The peak supply is in May and June. This peaks and troughs show the effect of when meal is fed in the diet. Each year meal/bales are fed in September to build grass supply for October and November. This graph shows an increase in supply for September each year. The calving pattern is now more compact compared to 2012. So the graph is showing more production in February and March. Weather also affects production. The dry summer of 2013 meant more meal and silage was fed and less grass went into the cow's diet so production was affected. The very good weather and the abundance of grass in October of 2015 also increased the milk sales. It should be noted that the graph is based on Glanbia collections. For example some months are 35 day months.

**Graph 2. Somatic Cell Count (SCC)**



Graph 2 above shows the monthly SCC of the farm. While it is not perfect we are working hard to reduce it further. Once the SCC exceeds a SCC of 350 then there is a penalty incurred. Apart, from the penalty it is not ideal for the SCC to be high. The main reason that SCC is a challenge on this farm is because one of the original herds of cows bought had Staph Aureus. This was a major lesson learned for the initial start-up. As a results other cows were been infected and SCC became a challenge to manage on the herd.

#### **How are we managing and reducing SCC and what had the biggest impact?**

- Early milk recording and one milk recording per month starting from the middle of Feb has been the biggest factor in controlling the SCC on this farm.
- If the young cows are over 250 for more than 2 or 3 milk recordings then they are treated and milk is left out from the tank as recommended by the treatment.
- Farm staff monitor milk recording and constantly record any quarter issues.
- Teat sealing of heifers 1 month before calving (plenty of time, help and very clean workmanship needed here). It's actually easy to do once you follow procedure. Contact us by Facebook messenger for more details if you plan to do this.
- Heifers tended to have high SCC for a few weeks after calving, this generally settled after a few weeks. If it didn't then the heifers were treated.

- Operating a second herd where high SCC cows remain; stopped spread to main herd.
- There was no spike in SCC if cows had to go on the out wintering pad for short periods in wet weather. This was because we cleaned the PAD and spread fresh wood chip when they came into lie down.
- If the cow has more than 3 or 4 high SCC then a quarter is dried. We don't want to end up with too many of these as when you have relief staff it's difficult for them to know what quarters are not to be milked in even with the leg straps.
- There has been very little mastitis outbreaks.
- We cull cows that are consistently high. These are mainly older cows for the past 2 years.

### **Lessons Learned!**

Cluster dipping in buckets was an absolute disaster when the farm staff tried it.

We have to wait 2 weeks for milk recording results which is too late when you may have a problem.

There was no difference between teat dips used once they were of good quality and used correctly.

Younger cows responded well to treatment. Older cows didn't respond.

Long dry periods for high SCC cows work well.

### **Total Bacterial Count (TBC)**

TBC is generally very good on the farm. We did have some problems with it around peak supply. There were a few areas where the TBC may have been an issue and we have changed these.

- Bulk tank – some parts needed to be replaced.
- Bulk tank doesn't have texting service to alert you if not cooling correctly, washings etc. This is a very important technology when installing a bulk tank.
- Milk filtration – needs to be big enough for the volume of milk going through
- Water Softener is essential if you are in a hard water area. This softens the water and reduces lime in pipes, less detergent needed and a cleaner looking plant!
- TBC test is expensive so that's why you don't get too many of these results per month. If you have an issue it is worth asking/paying for the TBC test to be done on each collection during risk months. As it can go out of control within a period of a few days during warm weather.