2014 International Year of Family Farming

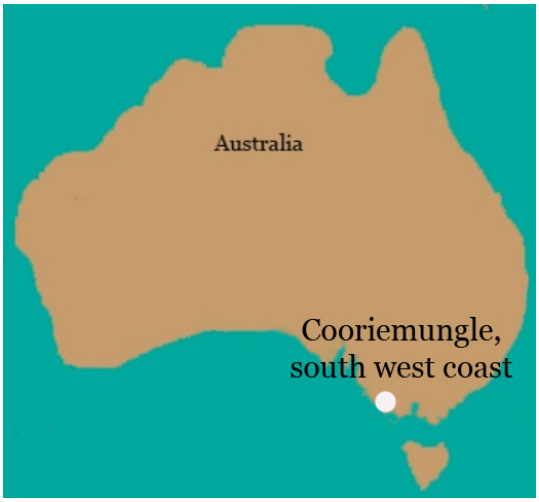
Feeding the world; Caring for the Earth

Family Farm Snapshots

http://familyfarms.enviroed4all.com.au

From cows to cheese, south west Victoria

Our Family



Have you been to a farm? Our family farm at Cooriemungle, near Port Campbell, in south west Victoria, has more to it than most farms! We welcome people here to experience farming - our **dairy farm.** We use some of its produce to make cheese, 'value-adding' in a family **factory,** here too.

Three of our five **family members live and work** on our family farm:

- our **son** is the farm manager, and does most of the milking, aided by an employee, during the week. He also grows the vegetables, fruit and beef for our family's use.
- **I** milk on weekends and at other times to relieve our son, and attend field days to promote our products;
- my wife rears the calves, helps make cheese in the factory and works in the shop;

Our other two children have non-farm careers.

Can you see the hills and cows on our farm here?

Our Farm

Our dairy farm, L'lubatol is in south west Victoria Australia, only 18 kilometers from the Southern Ocean and the dramatic **Twelve Apostles Coastline.** We have developed a second business based on our dairy farm – a cheese factory "**Apostle Whey Cheese"**. (see www.apostlewheycheese.com.au/nearby/). The area we live and farm in was part of the 'Heytesbury Forest/Settlement'. Our nearest town is Simpson only ten kilometers to our North, but Port Campbell to the southwest is bigger.

This land used to be a forest of 'bush' Gum, Wattle and under storey types such as Prickly Moses and Tea tree. It is pretty rolling **hill** country with variable soil types, with a very **heavy clay subsoil**. After WWII, it was chosen for forest clearing to provide farmland for closer settlement. Land for 350 dairy farms was **cleared** here **between 1956 and 1975**, but owners soon found it had **poor fertility**. **Lime, Potash, Phosphorous, and Trace elements** were put into the land to get **perennial pastures and clovers** established for grazing.

We have been on 180 acres of this property as dairy farmers since 1981. We have now grown to almost **400 acres,** improving it as we went – see Caring for the Earth section. In 2005, we added a cheese factory, using our milk, and **an education function**. We are open to the public and thousands of people visit annually, building a bridge between country and city folk. (see http://www.apostlewheycheese.com.au/farm/).

We are a dry land farm (use no irrigation), as we have a very good growing season from April to early January. Being close to the ocean we get good rains, making this a high rainfall area for Victoria, with 800 – 1100 ml per year, and a variable summer rainfall.

The original farm had 7 paddocks of about 25 acres. To improve the dairy farm management and look after the land better, we redesigned the paddocks into 5 acre- sizes. As we added more land, we continued that so we now have 53 **milking paddocks** of about **5 acres** and a further 10 paddocks of **smaller** size for **calf rearing**.

We have a mixed herd of 250 **Friesian, Jersey and Aussie Red cross cows**. They are all **milked every day** in our fifty-unit **Rotary Dairy**. Often children are watching. We have these different breeds to give us higher components of **Butter fat and Protein** in our milk, which are needed for cheese making.
Do you know how to tell which breeds are in this photo? Hint - Colour matters!

Our produce - 'Feeding the world'

We milk on average 250 cows all year round with a **split calving pattern**, half calving from mid February until end of April and again mid July until end of September. This gives us good fresh milk all year around for our cheese making factory, Apostle Whey Cheese.

We produce about **1.6 million litres of milk**. The bulk of it goes **to Warrnambool Cheese and Butter** for processing into:

- cheese,
- milk powders,

- whey powders,
- baby formula's and
- fresh pasteurized milk for the local market.

A lot of these products are also **exported** to places like Japan, Indonesia and China.

We use about 100,000 litres of milk on farm in our purpose-built **factory** (see http://www.apostlewheycheese.com.au/cheeses/) to create a range of **cheeses**, including:

- bries, (photo far right)
- fettas (middle photo)
- blue Veins (left photo)

About half of our sales are through our cellar door. We are open all year around except Christmas Day. The rest we sell to our wholesalers. We have four other people work in the cheese factory. *Can you see the different colours and textures of the three cheeses in the photos? This helps identify what they are. (For cheese types, see http://www.cheese.com/alphabetical/)*

Besides customers coming into our shop, we also play host to a number of groups, such as clubs and **school children** that attend nearby Camps. We **teach them where their food comes from and how farming ties in with the environment**. They may also experience cows being milked in the afternoon and see calves in their pens.

Includes 'Feeding ourselves'

We eat our own cheese too! The vegetables and fruit trees in our son's garden are also for our family use. A lot of is preserved for latter consumption. Our son also rears a beef animal for family use. So we have a lot of our own food to eat.

Sustainability - 'Caring for the Earth'

We are passionate about the environment and have transformed our farm to the benefit of the soils, landforms, the herd and Nature. We have changed the landscape. When came here it was fairly bare of trees, except for some introduced Cyprus trees. Now, **every second fence line is treed with native species**. It looks great (**aesthetics**) and provides vital **shelter** for the comfort of our herd of cows. As we care a lot about what we do, we were delighted to win the **2007 Weekly Times Farm Business Awards – The RAS Alternative Farming Producer of the Year.**

Nature

We have seen a lot more wildlife on the farm since replanting the native trees. They **provide native habitat** as well as benefits to farm animals and us. The **birdlife** is wonderful:

- a number of different **parrots**, like
    - King Parrot (far right photo)
    - Gang Gang Parrot (photo right)
    - Galahs (far right photo below)


Look carefully for the shape of the beaks of the parrots. It's a key feature of a parrot, as they need to crack open the seeds that it eats.

- finches,
- fantails ,
- hawks
- honey eaters,
- kookaburras (photo right)


Yes, these kookaburras sit on an old gum tree for a photo! … which gives a nice profile of the different shape of their beak. It is used to peck down into the ground to get at insects.

- Owls
- and water fowl including
    - ducks,
    - egrets,
    - swans,
    - grebes,
    - coots.

Other wildlife is here as well, such as:

- bats,
- echidnas, (photo above right)
- koalas, (photo right)
- possums eg Ring Tail Possum (photo below)

Can you see me in the photo right, peeking out of the box the humans put up for me in the tree? I need this for my home, because the tree is too young to have a hollow. We possums need the tree hollows that were lost when the land was cleared.

- And the kangaroos, just pass through.

Soils and erosion

When we first came onto our 180 acres in 1981:

- we had **few trees** except Cyprus.
- the **low soil fertility.**
- And **soil erosion** was bad on the creek.

We only had seven paddocks to work with and those paddocks were fed by five dams for water. The erosion problem was so bad that a house could have been placed in parts of it! So we **fenced** off this area and **planted** the first of our **native** indigenous **trees** to the area.

Our big challenges have been erosion and better water use. So over the coming years, the farm was split up into 30 paddocks of about five acres. The northwest boundary, from which most of our weather comes, and every second fence line was **planted to trees.** Later, when we added another block, we did the same thing. Our plans and effects are shown on maps superimposed on aerial photos, below – notice the green within our boundaries!

This photo-map is of the original part of the farm. The red line marks our boundary. Inside our boundary, the white lines divide the land up into our small 5-acre paddocks. The dark dotty lines are **native tree plantings** along the northwest boundary, every second fence-line and in the gully (zigzag line). The heavy yellow line is the farm road, running from the buildings on the road, near the Y-intersection, southwesterly down through the gully to the creek. This lowest part had 6 acres of **gully erosion**. It is **green now**, with a wide line of trees along the Creek, showing how well we have turned this **liability into an asset**. Our effluent ponds are the dark dams on the higher northeastern side of the farm. Three other dams collect rainwater run-off. The light areas are where we have just worked up the soil.

An addition to our farmland had similar problems, tackled in a similar manner. Again, yellow lines are farm tracks and white lines are fence-lines (for small paddocks). Bright green lines outline **native tree plantations**. Blue lines show five dam areas. Farm buildings (red box on the left) are beside the road, on a hill top. Thin black map lines are contours which join places of the same height, showing the slope of the land, dropping down to the right into a **creek, with gullies**. As the focus of **erosion works** and **rehabilitating unproductive gullies**, native trees are also planted here.

Water management

We only have **rain water** here- no mains water supply, and no ground water bore. So water management is very important. Rain falling on buildings is guided into raintanks for our use. Most rain falls to ground, and is run down into the dams, as seen on the photo-map above. Our dams have been extended over the years as cow numbers have increased; 1000-gallon **water troughs** have been placed in each paddock for stock consumption.

Subsurface drainage has been done over most of the farm and in a lot of cases these drain into our dams. This method helps lower the water table quicker to reduce soil damage ("**Pugging**"). In conjunction with a longer grazing rotation (26 day and 26 night paddocks), this allows sufficient feed to be grown, so cows are not being under fed and therefore not doing as much walking around on wet soils looking for more feed.

We also utilize the **effluent (waste water)** carefully from our dairy to get the most from it. It is collected in two large dams, so it can be sprayed over pasture and crops as a fertilizer with phosphorus, potash and nitrates. All the wastes washed from the dairy go to the first pond (anaerobic). Solid wastes are trapped, while liquids flow over the top into the second pond (aerobic). A pump from this sends this nutrient-rich water out through a two inch line for the length of the home farm. Outlets (pop ups) are placed at every non-treed fence line, for this water to go onto four paddocks in that vicinity. Paddocks on the other side of the road have the effluent from the anaerobic pond spread on them via a tractor. Together, we save money on **fertilizers**, and **nutrients** don't reach streams from our farm.

Native tree plantations

N**ative trees** give us many benefits:

- shelter for our **stock** (see photo right) **protecting** them
  - **from** the cold wet winter winds
  - **with** shade from the summer heat
- so the cows save energy on maintenance
  - and **use it in milk production.**
- Trees also attract the native bird life,
  - in the day and night.
  - They help to keep **insect pests under control**. (like the Masked Plover and Boobook Owl in the photos right)
- and, generally, create a lovely environment with in which to work (**aesthetics**).

Energy efficiency from breed choice

We choose to breed cows with higher components in their milk of Butter fat and Protein than most dairy farmers. As well being able to **value-add** on-farm, this gives us **more product**, for the same amount of energy used to produce it, as a herd with lower components. Hence the factory we send our milk to also **saves energy** in its production.

We believe in **caring for the Earth** and now monitor what we have already achieved. Maybe you can visit us at L'lubatol Farm and Apostle Whey Cheese!

Author: Julian Benson, I give Jeanie Clark permission for this article, the photos and information I, and Adrian Benson, have submitted to be used by her in the capacity she sees fit. April 2014
Additional wildlife, Geographic information, map, and editing by J. Clark. (cc) 2014

For more information about the IYFF go to:

http://familyfarms.enviroed4all.com.au for more in this series of snapshots

http://www.fao.org/family-farming-2014/ http://www.familyfarmingcampaign.net for the official IYFF sites

https://www.facebook.com/InternationalYearOfFamilyFarmingIYFF for the facebook updates