Management Efficiencies

Version 1.2

What can be more important than correct management?

Good managers don't create followers, they create managers, who can take over from them. Good managers walk around and visit the coal face, while bad ones keep away from it. Good managers invite all managers, and even some foremen, AND FOREWOMEN from all divisions and sections to the regular meetings.

Bureaucrats create followers who they don't want to pass them, so you should never allow bureaucrats to engage staff under them.

Countries' governments and local body councils become full of bureaucrats, which keep feeding themselves until there is a mass of 'yes' men or women and no leaders or doers.

Recessions aren't new, think of the 1930's, and of more recent ones which were always followed by an increase in demand. We've told ourselves that we (New Zealand) are the most efficient, now we have to break our own records, so it's a challenge.

Farming Management Efficiencies

Some things the best farmers do and/or should do - not all farmers do them all. They are not in order of importance. All are important.

- Have the best milking machine and maintain it. A survey I did of 603 dairy farmers showed that those who got theirs serviced annually or with new milking machines, produced more milk per cow.

This one may be a matter of opinion. What is the best machine?

- Walk the farm with a PastureGauge or notebook weekly or at least every 10 days (my preference). Plate metres can be so wrong that they are disasters. Try one on long perennial ryegrass and on long Matua Prairie grass and see. On short pasture and uneven ground Plate metres are no help. Train your eye.

- Aim for higher levels of selenium, copper, boron and molybdenum than the establishment recommend.

- No RPR is recommended. Some sold as such can take 20 years for all to become available. Fed Farmers published the figures. Sechura or Gafsa are the two worth using.

- Spread the best Calignosa and Terrestris earthworms on the dung pats.

- Avoid pugging. It kills earthworms, damages pastures, decreases pasture growth over the following five months by up to 30% and increases weed infestation.

- Good liming and fertilising will improve earthworm numbers and their strength.

- Set cow numbers at the optimum by using the spreadsheet Dairy cow numbers for max profit.

- When consulting I made a point of seeing clients milking. The top producers and I say -

Slow down at milking. Apply clusters gently without air gushing in as most do - sshhhhh, clop! To achieve smooth application hold your cluster hand higher and bend the liner tubes. The cows will love you for it and come in to the bails better.

- Never rush or shout at cows. Be gentle and consistent in the dairy.

- Have nice music playing at a reasonable volume. Cows with no radio are more nervous and jump more if there is a bang or sudden noise.

- Don't get out of the pit to bring cows in. If you do it, cows will learn to wait for you to do so.

- Don't over-use the backing gate.

- Train first calvers to the dairy well before calving by allowing them to go through on their way to new paddock. During the last time stop them for a few minutes.

- If a cow does the wrong thing, it could be your fault. If not, cull her.

- Before improving genetics, improve feeding, and afterwards of course.

- Always carry a notebook and pencil.

- Leave higher pasture residuals - about 1,700 kg DM/ha.

- Avoid substitution.

- Lime more - little and often, but not too much.

Don't use US semen except the BEST USA Jerseys which can make yours bigger and quieter with increased milk and MS volume. Use only once unless you want lower fertility, slower let-downs and lower MS percentages.

- Feed the best soluble mineral mix through the best dispenser.

- Take a pasture analysis of each soil type and in different paddocks every year.

- Aim for higher selenium, copper, boron and molybdenum levels than the establishment recommend.

- Test at least ten cows for selenium every autumn.

Before leaving this topic I'd like to quote two stories.

A new client in 1990 near Ngatea disliked milking as did his cows. He'll tell you now that he was doing all the wrong things - spraying the whole farm by helicopter for weeds and facial eczema spores with 2,4-D & FE fungicide, through not liming enough, using 30 and 50% potassic super. As a result he had bad spring eczema.

Nodules were white which meant they were not making nitrogen which makes them brown, possibly through low molybdenum in the low lime areas, and possibly low cobalt.

After doing much of what is in this document (Sechura, Solmin, finer lime) their animal health improved unbelievably, to the extent that the vet asked them if they were still on the farm when he saw them in Ngatea in September.

Only 5 empties, no spring eczema, no redness on udders.

Oversowed with Kopu and got a brilliant response. Their G28 grew vigorously the whole year. No pulling, no weeds. Earthworm numbers tripled in three years. In 1993 three cows did over 300 kg, two were off Pukeroro stud.

Applied lime at a tonne to the hectare in each of two years. Cows got bigger so they couldn't get the same number in the yard. Into the bargain they had no milk fever and no retained placentas.

He and the cows then loved milking.

Another farmer phoned and asked me to his Tauhei peat farm. His problem was upset cows in the bails. No, it wasn't shocks. He'd had that checked.

I soon discovered the reasons. His peat was under-drained and had not been limed for years which meant that his manganese levels would be high. In the dairy I saw that he was feeding a soluble mineral mix designed in UK which contained manganese, because it is low there - not here.

I said to change to Solmin and a week later he phoned with the news that the cows were quiet again.

Animal Deficiencies

White muscle disease is so-called because of calcium deposits which look white. Symptoms include a stiff gait and a reluctance to move, arched back, very stiff muscles, difficulty in sucking and breathing. Muscle lesions are noticeable in the thigh and shoulder. The characteristic whiteness of these lesions is partly due to calcium retention resulting from reduced muscle activity. Most sheep farmers in New Zealand are aware that a deficiency of Se in lambs causes -

- White muscle disease.
- Weak muscles shown by stiffness and paralysis of hind limbs.
- Death of new born lambs from heart (a muscle) attack.
- Scouring and ill health.
- Slow growth.
- Reduced wool growth.
- Supplementation, where necessary, increases wool production and fibre diameter.

- They know about the 1970 trials by Frank van der Elst and John Watkinson when Se treated groups (on peat at Ohaupo) showed significantly greater live-weight gains than the control group. They also found that Drenching at three monthly intervals was as effective as monthly drenching. I prefer a daily supply in the pasture or water.

However the ill effects of deficiencies in cattle are not as well known. Symptoms include -

- Newly born calves not finding teats and not sucking.
- Death of calves soon after birth.
- Stiffness and inability to rise.

- Calves with their front feet pointing backwards before birth can indicate Se deficiency.
- Reduced weight gain.
- Low milk production.
- Low solids percentage in milk, especially low protein.
- Increased mastitis.
- High somatic cell counts.

- Scouring whereby cattle have long zigzag droppings which can be two to three metres long in paddocks. Long droppings in lanes are not a symptom and are from animals having to keep walking.

- Reproductive disorders such as erratic or silent heats, poor fertilisation and delayed conception.

- Retained placenta because proper contraction of the uterus after calving doesn't occur, aggravating the possibility of infection and delayed cycling, followed by poor conception rates.

- Cysts on ovaries which slow conception.
- Metritis (inflammation of the uterus).
- Foetus loss after 23 days, and early abortions.
- Iodine deficiency.
- Foot and leg problems.
- Lowered resistance to diseases if either or both Selenium and vitamin E are low.

- Increased chances of a heart attack (it is a muscle) when bloat, milk fever, facial eczema, etc., affect animals.

- Arched back in older animals.
- Lowered antibody production.

As now seen, selenium is an extremely important element for animals. It is also important for people in New Zealand where it is very low.

Human Health

What has human health got to do with farming?

Everyone living in New Zealand and not taking Se will be short of it, unless growing all their food and fertilising with Se. I see farmers looking worn out and down. How much is because of low Se and other elements? Going on my experiences and observations, many.

Se is an anti-oxidant, and with vitamin E, which is also an anti-oxidant, they counteract cadmium toxicity and radiation. Se is claimed by many researchers to weaken the immune system and reduce the chances of some cancers and heart disease (cardiac failure).

It reduces stiffness, helps muscles, digestion and general health. NZ blood tests show that most people are deficient in selenium. Read Selenium as Food & Medicine, by Dr Richard Passwater, Pivot, USA, and Selenium, by Alan Lewis, Thorsons, UK. They claim Se reduces cancer. Selenium needs vitamin E to work. Try Selenium Ace.

Parts of USA are very high in selenium, so extra should not be required in those areas, or if some of their food comes from adequate areas. However, many parts are low, but people, especially children, don't like taking pills, and why should they, when the food they eat can be corrected by fertilising and/ or by supplying the animals. Finland is low and their government legislated in 1984 that all fertilisers had to include Se. People in areas low in Se have much higher rates of heart disease than those living in high Se areas. Rapid City, South Dakota, has the lowest cancer rate in the USA, and the highest measured blood Se levels, while in Lima, Ohio, the cancer rate is twice that of Rapid City, and citizens have only 60% of the blood Se level.

In Linxian county, China, a five year study involving 29,500 people, the gastric cancer death rate dropped by 21% and the and oesophageal cancer death rate by 10% in those given relatively small amounts of Se, vitamin E and beta carotene.

Mice supplemented with Se throughout their lives lived longer, and had less cancer.

Many New Zealanders are very deficient in Se, some with blood levels a third of those in the UK. Wheat imported from Australia helps raise New Zealand bread levels, but human blood levels in NZ (and in some USA areas) are still below recommended levels. A New Zealand farmer suffering

continuous acute headaches took Se and vitamin E tablets and his headaches stopped.

In New Zealand, normal food supplies about 30 micrograms (mcg) of Se/day, but 100 mcg is the accepted daily requirement. The optimum human blood range is between 1,000 and 2,000 nmol/l. Human blood tests have shown that average New Zealand levels are about 600 nmol/l, while those in the USA are 1,000 and in the UK where there is no deficiency, 1,200.

Allan Nation, editor of Stockman Grass Farmer USA, told me that a US trial found that men in particular with high levels of Se in their blood had more energy and optimism.

I take many minerals and get my hair tested to check levels. All the elements I was taking were adequate, while all those I was not taking were low.

The typical doctor story of 'if you are eating correctly you will be okay', is possibly OK for hard working farmers with large appetites eating their own fresh vegetables grown with lots of animal manure, compost and balanced fertiliser. For a townie with a small appetite on the comparatively stale supermarket vegetables and fruit, from depleted market garden soils fed mostly nitrogen, phosphorus and potassium, it is not. Even if they eat meat, it still comes from our pastures on high rainfall leached and Se deficient soils.

Many friends who have started taking Se and other minerals they need, depending on the person and their area, have enjoyed improved health. The cost is cheaper than reduced ability, doctor's visits and hospital fees. 400 micrograms is the US maximum daily limit per adult.

Blood levels of selenium are lower in people with muscular dystrophy. Dystrophy means malnutrition or defective nutrition which includes inadequate Se, calcium, boron, magnesium, zinc, iodine, etc.

Farm Surplus

A farm run as a business, can be a very good way of life, but if run as a way of life, it can be a dead-loss business.

There are things in dairying which also apply to other farming which affect profit. In New Zealand the following has been extracted from the accounts of highly profitable farms.

- Soils have high phosphate levels.
- Stocking rates are optimum.
- Herd genetics is high.
- A tight calving pattern for seasonal milking.
- High producing (latest) pasture species.
- Well grown replacements.
- Perfect drainage.
- Minimum pasture damage.
- Judicious use of nitrogen.

These items are fairly easily achievable, even if it means selling a poor herd and replacing it with the best. However, like everything, if you leave taking corrective action until too late you may not be able afford it.

The top 10% of NZ dairy farmers earn double the EFS of the average - \$2,000 against \$1,000/ha which translates to \$160,000 gross profit against \$80,000 on an 80 ha (200 acre) farm. These are real figures, not possibilities.

Almost all farmers have a net profit equal to the amount their family requires to live on. The rest goes into the farm, most of which are bottomless pits. This applies world-wide. Examples are a USA 1,000 acre good grain grower/feedlot fattener I visited had a net profit of US\$50,000. A 300 cow dairy farmer had the same profit. A 100 cow one had a profit of \$40,000. These are good farmers' figures, not those of drop outs.

The return on their total investments can be as low as 1%. NZ is not much better because of our high land prices caused by being a small country where many people want to farm and/or live.

Farming prices are cyclical so those who borrow large amounts of money are at risk, and if they are offside of a cycle they are doomed. This has always been the case and always will be. The aim should be to make money when the cycle is with you, save it, and survive through the downturns.

A successful farmer thinks and plans ahead right through to retirement, a ten year plan, a one year plan, a season plan, a week plan and tomorrow's plan.

If these plans (except tomorrow's) are written down and remembered, things can be done which will reduce work and make the operation easier.

The extra time planning is little compared with the job and will help you get on top of work rather than run behind.

The profit of companies is judged by their dividends. Family farms don't have such a measure. In New Zealand the system of farm surplus, also called effective or economic farm surplus, is used. It is the profit before paying interest, income tax, capital purchases or living expenses.

To be able to compare the profit of large and small farms, the total farm figure is divided by the number of hectares (2.47 acres) to FS/ha. Current dairy figures go up to \$2,500/ha and the beef figures vary with the highly fluctuating beef prices. A few years ago when dairy payouts were low and beef prices high, the best beef farmers were achieving figures nearly as good as the best dairy ones. One might wonder how this is possible, but beef costs are a lot lower than dairy and one person can manage a lot of beef.

Commercial businesses aim to avoid (not evade) income tax where possible but when they are paying a lot of income tax they know they are doing well, whereas some farmers try to evade* income tax and don't appreciate that when they are paying a lot they are doing well. The result is they pour money into loss items such as machinery just so they can claim the high rates of depreciation.

* One farmer couldn't decide whether to enter his water bed as a water trough (100% claim in first year), water pump (20%) or work bench (10%) so he could illegally claim depreciation.

What is important is to smooth income tax so that you don't pay on the high rate one year and a low rate the next. Fertilizer, lime, oversowing and maintenance should be used to achieve this.

Problem Solving & Decision Making

Some people have no problems in life or business, they just consider them as hurdles to jump as a hurdler would. Others see each problem almost as the end of the world. A problem is only a problem when it causes a problem. Many supposed problems are only in ones mind. Some go away on their own, so don't waste thinking time on

what may not be worth worrying about.

Few problems are as bad as they first seem and those which money can fix are only hurdles to be jumped. Problems are like pains, one usually feels only the worst one, so a problem is the most urgent thing which worries one at the time. It may be significant or insignificant, depending on other things to do at the time.

When making decisions, always try and do the things which will do the greatest good to the greatest area first. For example, if in spring four things have to be done such as:

- 1. One hour to fix the fence to keep the bull in.
- 2. Two days to cultivate and sow the summer forage crop.
- 3. Three days to make the pasture silage.
- 4. One day to build a new fence across a large paddock to subdivide it.

In this case they should be done in the order listed. If the bull gets out more severe problems could occur, some of which could be irreversible such as getting the cows in calf to a bull A rather than bull B. If the crop is not sown on time it may not germinate if the weather gets dry and will be late for grazing when the dry weather starts. Some crops sown only a few days after another were complete failures because it didn't rain again for a while.

Silage making being delayed two days will not affect much.

However, if the weather forecast is for rain in three days time then the silage should be made before cultivating and sowing the crop.

The fencing is really a 'stock job', however I've known several farmers who loved fencing so did so, one even ahead of starting to feed silage to hungry cows which were over-grazing the pastures, doing severe damage to themselves, the pasture and the bank balance.

Some people mostly do the smallest or easiest things first so some big jobs never get done. Some

people were born late and never catch up. If you are one, you are losing money. Snap out of it. In farming, doing all things late for a year can be a cause of no profit at the end of it.

When one is young or very busy a problem is just something which has to be done and may not register in ones mind as a problem, but when one is not busy or gets older simple things can become problems, especially if one is tired or unwell and a solution is not found fairly quickly.

If a hurdle can't be jumped, don't keep trying to cope, lower it. When one gets older, hurdles may have to be lower, which may mean taking twice as long to do a job. If you worry about this it will take longer to get started and much longer to finish.

Know yourself. It is difficult or even impossible to change yourself. If you need to discuss things with others, then do so sooner rather than later to solve the problem and get on with the next one. Sometimes the only thing talking about it with someone else does, is to make one concentrate on it, so the solution comes to oneself while the other just listens. There is nothing wrong with this. Some people's thoughts on problems go right to the end in a flash, others never get past their nose. The second person could be nicer, but have this single limitation. So learn to recognise yourself. An example is -

Animals line up for hours to get a drink from a small water trough in the back paddock. The hasty and possibly wrong decision could be to install a larger trough. The first thing to do is to check the real reason for the delay. Check when the water shortage starts and ends. Is it really insufficient water or are a few cows standing around the trough and causing the delay? Is the problem not a shortage, but because the water gets hot from running through piping on the surface of the ground, so the animals sip at the water and hold up others? Is the trough dirty so animals don't like the water so drink very little and then return for another? Is the trough narrow and deep so animals don't like putting their heads down into it while others are around and may butt them, so drinking is prolonged? Is the trough under the fence so that only one can drink at a time, etc.

You may need look into whether the trough is drunk down to near the bottom within a few hours of the animals going into the paddock and remains low all day, then a larger trough or even two troughs won't help much. If the other troughs in the area cope, it could be a pipe, fitting or ballcock restriction.

An easy low cost solution could be to change the small water trough from the back paddock to a larger one in a paddock close to the pump, but before doing this look into whether you are going to increase the number of animals and cause all troughs to be too small.

If slow water flow is the cause, think of, or better still write down all the possibilities. These may include, changing the ballcock from a high pressure to a low pressure one (some have a screw which can be removed), cleaning the pipe, searching for a blockage in the pipe (I had a low flow problem, it took a month to sort out - a snail had got into the pipe before coupling it up, so keep ends closed off until coupling), increasing the pipe size, installing a ring main water supply, increasing the water pump pressure, installing a bigger pump, leaving the gate open into an adjacent already grazed paddock, using the paddock as a night one or on rainy days when animals drink less, or even doing nothing if the problem is only on a few hot days each year.

An example of a repercussion is after installing a bigger pump having to increase the bore or well size.

Plan

Everything you do should be planned, calculated and monitored. The days of being able to do anything in a casual sort of way and survive are gone. There is now too much competition and overproduction in agriculture.

Success means quality of life and profit, in that order. Some changes take away quality of life by over-loading the family and work force. For instance milking 30 more cows will not allow more staff to be employed, so it could be better to feed the existing ones better and graze some dry stock. Milking 50 more cows may pay for a young helper and leave a profit, but require the person to live in the family home.

Talk about plans with all concerned and keep doing so for quite a time. Avoid hasty long term decisions. Think of ALL the repercussions.

Planning means working from records and aiming for improvements, setting targets and monitoring them.

Tomorrow's Plan

There is a frequently used saying 'Those who fail to plan, plan to fail ', which is so true. When hiring staff, good companies ask applicants what their goals and long term plans are. If they have none, employers know that they won't plan their day or work and won't organize themselves, so are not good to employ. If you are self employed you don't have anyone except yourself to whom you must answer, but for your own good, plan. Some have complicated plans. Mine were simply to own a dairy farm as soon as possible (did so at 24), to improve it to milk 60 cows within 15 years (did so within three), and to retire by 40 (did so at 35). Plans change, so you should update them as set out below. After being retired for two years mine changed to never wanting to retire because I enjoyed challenges and being productive.

Don't make major plans when tired, sick or frustrated.

Think today about what you'll do tomorrow, and definitely don't leave doing so until you start the job.

Week's Plan Plan this roughly by the end of the week before.

Season's Plan Plan this by the middle of the season before.

Five Year Plan Keep updating this each year, five years ahead.

Ten Year Plan Keep updating this each year, ten years ahead.

Long Term Plan

Before making any plans which will affect things for longer than one year, make sure you are feeling healthy, rested and positive. The best way of achieving these is to have a proper holiday of at least two weeks. Things can then appear quite different and much clearer. If the least bit uncertain about anything, then make the decision to not do anything. Be VERY careful to avoid being influenced by relatives, friends and most of all by peers. Peers frequently have the bad habit of encouraging others into the same hole that they are in.

A few examples are; junk fertilizers, milking parlor designs, brands of tractors, breeds of animals and farming systems.

The time it takes for a person to acknowledge that what they have done is wrong, is in direct proportion to the amount it cost them.

Don't let anyone affect your personal goals and feelings. Some people like spending half the day milking, others don't want to spend more than an hour twice a day milking. Some can operate machinery all day, others hate it. Know your loves and hates and decide accordingly or you'll regret it.

Retirement Plan

By the time you are twenty you should have a retirement plan. That is when you would like to retire, where and with how much income. These can change, but without a plan the years drift by and the longer you leave saving, the harder it will be to save the amount required. Savings can be invested in land and animals, but not in machinery.

Calculate

Systems should be set up. With computers it is so easy and only takes time and discipline to keep it going. It is unproductive to spend time starting something if you don't finish it. If computer work is difficult for you, involve your family. There could be one who loves it. There are farming programmes and templates written for most projects. See Computers.

Fertilising, liming and the best pasture species, can all be monitored by measuring pasture

quantities before and after grazing and adding the totals to decide the best for your farm and to calculate the profit from each. A template to do this is included in the package, or you can write one yourself by setting out -

Fertiliser, Lime or species Date Control Before grazing After grazing Total yield 2nd measuring Before grazing After grazing Total yield Running Total 3rd measuring, etc.

Get Quotes & Set Specifications

Prices for jobs by contractors, builders, etc., can vary by up to 100%, and the results can vary to the same degree. The way to avoid being fleeced and ending up with a bad job is to get at least three quotes for each job and to put everything in writing. I can imagine some people thinking of this as hard work and unnecessary. If you know the contractor this may be true, but even then misunderstandings occur.

To make the job of communicating easy, make up quote forms on your computer. You then only have to change it to suit and print it. Once you have set it up, it will be quicker to fax it or post a copy than to make a phone call. Ask the contractor to write the quote on it and return it. If they see you are business like, they will make sure they are too.

If, for example, employing a painter, set it out as follows.

Please supply a price to:

1. Remove all loose material down to a sound surface, or, remove old coats of paint to the timber. Sand to a smooth finish.

2. Water blast the surface to remove all dust and dirt. Clean up the washings.

3. Allow it to dry for a day in fine weather.

4. Prime the surface with XX brand primer without thinning it. Sand lightly and dust off.

5. Apply brand YY pink undercoat. Sand lightly and dust off.

6. Apply brand ZZ Ivory colour top coat.

7. Clean up completely so no paint or dirt is on windows, floors or other surfaces and remove all dirt and litter from the operation from the property.

Don't allow any paint or paint products to run down drains.

Do the same for cultivating, spreading fertiliser, etc. Cheap prices for fertilising or liming can mean that the spreader travels too far apart.

Do Things Right the First Time

The first solution to a problem may not always be the best one, for example instead of putting two troughs in the back paddock, it may be better to increase the water pipe size on the whole farm. This may save needing two troughs and overcome drinking delays in other paddocks.

An example is the actual case of a US farmer with a large herd who needed to shorten milking time so built a swing over herringbone, when had he written down everything he would have built a rotary parlour and saved two labour units, saved two houses and still milked more quickly. The extra capital cost of the rotary would have been paid for in two years of saved salaries and housing costs. Cows and people prefer Turn-Style rotaries to herringbones so milking would have been more pleasant.

If you have ever compared a city which was not planned with one which was well laid out you'll appreciate the saving in time for millions of people over centuries. Thinking and planning before doing anything costs you only your time, and perhaps the time of others if you do the right thing of discussing your plans with ones who can help, including the best consultant on the subject.

A well laid out farm is a joy to work. Lanes which zigzag rather than go direct to the central point (milking parlour, scales, yards, etc.) are a pain. If your farm is not well laid out, start planning to correct. The first thing to do with any project is to calculate how much time you and others waste because of the inefficiency. Then you'll know how much you can spend on fixing it.

Do Two or More Things at Once

If you plan ahead you can think things right through while doing other jobs such as driving, milking, mustering, eating, showering, bathing, and before and after sleeping. Quite often a problem at night solves itself the next morning because a tired brain doesn't have brilliant ideas. A relaxed brain on a rested body does. The later you stay up trying to solve the problem the less likely you are to then and the next morning when still tired.

Three things you can do together are when washing your teeth, you can bend down and stretch the backs of your legs as when touching your toes, and breath deeply about ten times. Both are important to maintain a fit body.

Distasteful Jobs

How do we overcome a dislike of starting a big distasteful job? We don't allow it to become a big job by, in this case, not letting the place get in a mess.

Lots of us will start small jobs because we can see the end, while large jobs are not started. To make a big bad job into a small nice one, divide it up so that doing only a quarter each time becomes easy. Then plan to do a quarter, or even less, each week until it is all done.

Life is always a compromise of mixing what we want to do with what we have to do and there is nothing wrong with that. If in life we did only the thing we liked we would soon get bored with it and it would no longer be a thing we enjoy.

I find that if there is a thing which I dislike, but has to be done, I will do it more cheerfully and faster if I plan to do something I really like after it. So on Saturday after tidying up, one can take the family out, go fishing, watch sport, have a sleep, read a book, walk though the grazing stock, visit friends, invite friends around, play the electronic organ (my favourite), sit in the sun and think or plan.

Yes, we must all think and plan or we will get nowhere in farming or in life.

So now let's plan how to keep the whole farm tidy with a minimum of effort.

Firstly, we need a schedule.

If clean-up is not Saturday morning, make it Friday morning, or you won't have the incentive of knocking off after finishing. Make sure you do schedule and operate it.

Secondly, we need to plan the farm and our work to minimise having to tidy up. This is done by storing tools where they are used most and having one at each place if needed, rather than having to walk a triangle to get it.

Think around cost benefits and don't be hamstrung by tradition in your planning.

Tidying Up

Many farms are so neat and tidy, but some are.. I'd better not say!

Most of us hate tidying up, preferring to do something 'constructive', but if we don't organise our lives and our work we become messy, so we must organise ourselves to keep the farm tidy.

If we don't make a specific time to do so, it won't get done.

When farming on my father's farm in South Africa pre 1954, with ten staff, keeping things tidy and in place was almost impossible, so what we did on Saturday mornings was tidy up, grease and oil and everything, and put them in their place. Once it was all done we knocked off until afternoon milking. This made a dreary job into a fast operation, usually finishing by about 11 am.

Having done this for six years made it easy to continue the habit when, in 1955, I bought my first farm. The only difference was that because I was developing 150 acres from swamp and brush and milked 28 cows in the first year and 100 cows six years later, just with the help of my wife, I didn't have much to tidy up, but there was always something, because of being busy during the week, perhaps trying to beat the weather to sow forage crops or harvest hay or silage.

Saturday was also the time to service machines and get them ready for the next week.

Being what we are, if we don't plan and make schedules, things are put off. I think we all

procrastinate a bit and all suffer some inertia, so we justify continuing to do what we are doing, rather than change to what we know we should be doing, especially if the thing to be done is a big job. I think we also secretly hope that nasty jobs will go away and cleaning up is a nasty job for most.

A main reason for being tidy is that when things are in their place it saves time looking for them and time is money, and who knows the cost of stress on ones body and mind when one can't find something.

They say that it is an ill wind that blows nobody any good. I find that when looking for lost things, one finds things previously lost, but I made a policy of instead of searching for lost things, I would tidy up in the area where they should be so at least I was achieving something.

Tidying up Scrap

Once you have reduced your workload because of all the efficiencies you have implemented, you will have time to tidy up your implement barn and yard of 'scrap'.

Yes, if hasn't been used in a year, or at the very most two years, it is scrap, so sell or dump it.

Weeds and rodents thrive in old machinery lying around. If it all covers a quarter acre it is costing you the lost production from it which can easily be \$500 a year. Would you throw away \$500 once, let alone annually.

Phone the scrap merchant now. If there isn't one, then phone all your neighbours and organise a railway wagon or trailer load and phone the nearest scrap buyer about delivering it to them.

The longer you keep it the more you are losing, and the more likely you or your children are to have an accident on it, so, even if it costs you money to get rid of it, do so.

In New Zealand farmers can be prosecuted if a person is injured by a hazard on their farm, and old machinery in long grass certainly is a hazard. Who has driven over, or been close to driving over harrows or similar in long grass. If you haven't, it could be your turn next, so get rid of the cause!

Children climbing over old rusty gear can get nasty cuts and scratches.

Farms where the owners' son is the assistant are frequently the most untidy, simply because the son thinks he should not do the dirty work. I don't know who he thinks should, but that is another story.

The father is sometimes so glad to have his blue-eyed boy home on the farm, after having had some bad experiences with employees, that he is scared to upset him. I've seen situations where a hard working couple who started with nothing and secured a farm, cleaned up after their son, and I've seen a son stand and WATCH his father and mother work.

He needed a year in Russia. If you have one of these sons, then sit down with him and work out a schedule to get the farm tidied up.

If you have staff, then involve them when, or soon after, making a plan, and certainly before making and announcing final details of say the tidy up schedule. If they have shared in the plan they will make it work. If not they could make it fail by having a headache or having to go from A to B because they conveniently forgot to before.

Look After Cents and the Dollars will look after themselves

This applies to farming, especially now that profit margins in most farming are decreasing.

In farming a few cents can be lost from many things, adding up to a lot. Two examples are: having soils just a little too wet, or animals a little too covered in dirt.

I hate to see water lying on soil because I think of the soil changing to anaerobic, earthworms and soil microbes drowning, the mud which will be created when grazed and the animals unable to lie down and also covered in mud. I also think of how easy it to fix most soils with roto ditches at a km an hour. However to some people it is of no concern.

I hate to see dirty animals because I think of how uncomfortable they must feel, how they waste time trying to clean themselves instead of eating or chewing the cud, and the dirt and parasite eggs they eat when they lick themselves.

All people have different hates and levels of tolerance before they become hates. It is good to develop hates for loss causing items, and not worry about ones which don't matter, such as sagging fence wires, and remember if it ain't broke, don't try and fix it.

Budget

No doubt your spouse - who perhaps does the accounts- will ask why you need two shovels, so you better have a good reason. One reason is to save a minute a week fetching it. This means 52 minutes a year, which at \$40 an hour is \$35 which will more than pay for the shovel to keep a drain open, or a spanner to tighten the water pump gland every week.

When buying things such as shovels and spanners, start at the second hand auction mart or local sales of closing down farmers.

You might question the \$40 an hour for your time, but your time is worth whatever your veterinarian, accountant, contractor, etc., charge you, because if you have spare time you will do some of the things you would otherwise get them to do and save their charges.

If you don't value and calculate your time in this way you will not be efficient and will waste your time doing things which are enjoyable but highly unprofitable, while important jobs are left.

Every job you and your staff do should be analysed for how well it was done and how much it cost you or your staff in time.

Efficient companies do this and the person concerned may have to write a brief report on the job for the boss. You are the boss so a written report to yourself is not necessary, but an analysis in your mind is.

If you rush from job to job without planning beforehand and without analysing afterwards, you will spend your life doing so. In companies it is called 'putting out fires' through lack of planning. Fixing breakdowns comes into the same category.

When on the tractor, charge your time in your mind at the tractor rate, which must be higher than a contractor charged because you can do it better than anyone else and you are the boss, so your time is worth more. Know how much it costs to run your tractor, ATV, truck and car, allowing for interest on the cost, maintenance, repairs, insurance and depreciation - one day it will be worth nothing and added to the junk in the grass which we are going to talk about in a minute.

Some highly successful farmers carry a pocket calculator and note book with them always.

Examples of analysing jobs:

- How can I save having to clean the drain every week which costs \$35 a year of my time. How much would it cost to fix the drain so that it doesn't ever need cleaning again.

- Tightening the pump gland takes five minutes a week which totals 4.3 hours a year costing \$172. This would more than pay for replacing the rod or shaft which is worn and causing the gland to need tightening weekly instead of only quarterly. You need to check the pump at least quarterly, so the gland can be tightened then with the spanner which is already there.

When analysing, it is imperative that you think right to the end, before doing anything. For example don't buy the shovel then fix the problem and not need the shovel.

Some people have vision to see through to the ultimate, some don't. If you don't, then work on it and get help. If a married man, then your wife may be the one to tell you your shortcomings. She and your mother will know them better than anyone. Many men should forget their ego and come out from their facade to benefit from their wife's intuition. Also think aloud with them to have a bouncing board. Most people think more clearly and more deeply when doing so with someone else, because the mind concentrates on the topic and two brains are always better than one, especially when one is tired from rushing around from A to B and back all day seven days a week.

If they milk cows in an antiquated parlour at the rate of 60 cows or less per hour, start at 6 am and finish at 7 pm 365 days a year and haven't had a holiday in yonks, then their energy, thinking and planning power will be like that of a zombie - useless.

If you fail to plan, you plan to fail.

If you are not making a profit on your farm, don't blame everyone else, look at yourself and your planning. Maybe you should have sold it years ago.

If your farm is untidy don't think you are so busy that you don't have time to fix it. Some people keep theirs meticulously and you can too.

Remain Positive

During droughts, floods, down-turns, low prices, depressions, etc., I know it is easier said than

done, but try and remain positive, think solutions, and keep positive company or you won't succeed in remaining positive yourself. It is also important to avoid being on your own for too long and to keep meeting positive people and ones in the same predicament. Discuss solutions such as how to avoid recurrences, prepare for repeats.

Read and re-read books on farming. You may pick up tips which help.

In all your farming, choose methods and equipment that add the least to your production costs, and not ones which hook you into high cost systems. Let profit motivate you, not production. Then if misfortune strikes, you will be better equipped to cope.

Sentiment Can Break You

When I suggested selling and buying a bigger farm in a better area to a US farmer, he wrote to me 'We tend to love the land over here a bit more than ya'll, and get attached emotionally to the place, so we have to make the best of it. We do that here.'

I replied that most people everywhere in the world become attached to their land, whether it be a tiny city section or a large ranch, but they become a lot more attached to land making money, and from which their children can make a good living. It is no good being attached to land which is breaking you and will be a total liability to your family if you expect them to farm it, and then you wonder why your family moves to town.

Some people should get real. In the comparatively short life we have on earth you marry your spouse and nothing else. Also, if farmers want to live on sentiment, as well as have a good lifestyle, then they should not complain about no profit, and about completely unsubsidised New Zealanders beating them in the world (and US) market place with beef, dairy produce, wool, Kiwi fruit, apples, etc.

New Zealand farm products have a supply limit into US, some have tariffs and some are barred completely. No US farm products or equipment have controls or tariffs into NZ and only built up automobiles have a sales tax.

Many Northern Hemisphere dairy farmers I've met expect to make good money off comparatively small farms. Some expect to do this even when employing staff to milk comparatively small numbers of cows - under 80. They won't do so out of milk alone, so could consider breeding up and selling good GRAZING dairy heifers and bulls, for which there is an increasing demand in US.

My most profitable New Zealand dairy client, who has built up a top herd, makes as much money from selling heifers and bulls as from milk. With today's technology a top herd can be bred up within ten years. The opening is there because semen from NZ bulls is not allowed to be registered in US pedigree books. This is ridiculous and a case of protecting the established breeders which is a recipe for going backwards and leaving openings for others.

There are now two Jersey breed societies in New Zealand because some were against allowing grades to be bred up to pedigree. The pedigree fanatics now have a much smaller society.

The publicity that US Holsteins are better than New Zealand ones is questionable. When allowing for weight, bought feed, longer lactations there is little difference. After throwing in grazing, New Zealand ones win. Ask Mexicans and British users of New Zealand semen.

Accountants

They are there to help, use them for more than doing your income tax returns. They should know what successful farmers are doing and could help you - if you ask.

Budget

When margins are fine you must choose the best options and know where you are going, so plan and budget for all contingencies.

Do budgets for the next two years and revise them and cash flows monthly. Do them in hundreds of dollars so you don't get bogged down with adding and mistakes.

Bank

Treat your farming and banking as a business so submit an annual report, ie.,a letter explaining developments and perhaps a photograph. Doing this saved one farmer having to get a \$500 property

valuation for a bank.

Shop around

You are in a buyer's market, use it.

Grazing out

Many good farmers do this, especially in Winter, even at \$7/cow/week. The farmer takes a well earned rest and has an undamaged grass covered farm. Do your sums and shop around.

Insurance

Get new quotes for fire and vehicle insurance and look into increased excesses on all, especially vehicles. Most can carry a \$1,000 excess. Doing so reduces some premiums by almost 50%. No claims in four years and you've saved the first thousand dollars.

Labour

Be kind to your labour, they have the perpetual worry of suddenly being unemployed. If however you can do without them at any stage, you owe it to yourself and family to cope on your own, but give your staff the warning you'd like to receive. Can a boy replace your married man? Can you then rent the house?

Learning

This is most important now so keep reading, listening and applying. Knowledge helps you make the correct decisions. It has been said many times that if all the existing knowledge on farming was implemented, our production would double. How much could you increase yours by, profitably? Surpluses shouldn't deter us; New Zealand farmers have always thrived by increasing production.

Let the small and re

mote dairy farmers go into goats, deer, etc. Dairy farm numbers have dropped from 49,000 to 16,000 in 30 years; only the growing and efficient ones will continue. If you aren't over committed work-wise you could look into running some Angora goats, they are the most profitable animals per hectare. If your fences are good electrified ones or can be electrified easily, you may be able to run goats without reducing cow numbers and save some weed spraying. Investigate all avenues. Farm management courses are good value, even as a refresher.

Increasing production

To succeed we must be the best and most productive at our chosen profession. Feed budget, measure your dry matter and allocate accurately without waste.

Do your own fertiliser response trials by measuring dry matter growth from different application rates. Pin point your optimum fertilising rates.

Wet areas may grow only 1,500 kg/DM between grazings while adequately drained areas may grow 2,700. Allowing for a residual of 1,200 means that the poorly drained areas are yielding only a fifth as much, possibly for eight months of the year. This can average out at a quarter as much over the year, meaning that good areas earn, say, \$1,000/ha and poor areas \$250/ha. Spending \$750/ha to contour and/ or drain correctly can be returned in one year. What an investment!

Does your soil need deep ripping? Some show an increase of 100% after doing so, giving better winter drainage and

better summer growth.

It is the measuring of dry matter and residual reading that have brought home these figures. Can you afford not to?

Increasing Productivity

Can you add to your productivity? Many people milk and hold another job. Streamlining your shed and plant may allow this. Do a budget, labour saving devices will never cost less. Their use could save a labour unit or free your wife to earn income in some other way. Does she and your daughters

know that hand knitted garments are in demand.

Selling part or all of your farm

Local bodies now appreciate that one hectare is adequate for some rural uses and that some can be more productive/ha than large areas. Unproductive or steep areas are usually allowed to be sold. Councils which think it through realise that their rates income is higher on small blocks and farmers sometimes have no option but to sell a portion to reduce debts and remain on the farm. Is this a solution for you?

Selling all your

farm on today's prices could be regretted, unless you buy again on the same market.

Milking

Milk three times in two days to save power and wear and tear on you and your plant. Gross production will be down slightly (the Dairy Board will love you) but net profit could be up, especially if you've saved a labour unit in doing so.

In February divide your 300 cows in two and milk half am and half pm on your own.

Don't wash clean udders, wet teats produce dirty milk. Spend the saved time on filling races and gateways. Keep your hands and cups clean.

Milk quickly and practise mastitis prevention.

Spray teats after milking with iodine and glycerine. Read Aglinks on milking machine washing and choose the least costly one for your farm eg., cold water with hot once a week. Bad water requires more detergent and more heat. Improving your water may save detergent, power and grades.

Personal Expenditure

Most people have to control this, so you are in good company.

Stress

Respect it and study it. Recognise symptoms - headaches, back or neck aches, can't sleep, temper, etc. Your spouse may be under greater stress, and if you are, then your children certainly will be.

Discuss stress with your family. As the household head it is your responsibility to do so and to set the example.

Ensure rest, relaxation, hobbies and communication. Avoid stress-aggravating meetings and discussions. Remain positive, think things out, implement them, then get on with the next job.

If you can't pay all your accounts, pay

those which have to be paid and then forget the others, until the next month, but keep your creditors and bank informed.

Try and consider debts and overdrafts as book entries, not as personal loads.

But do economise.

Don't worry about things you can't change and always concentrate on the job in hand to avoid accidents and mistakes. Discussion is the best stress reliever, use it positively, with your family, friends, advisers, discussion groups, accountant and city friends, they have it too - there are 70,000 unemployed and more likely to follow.

Repairs and Maintenance

Fences

One electrified offset on a completely worn out fence can add 20 years to its life and make for easier strip grazing. The winning Gallagher Farms of the Year usually have about 40 paddocks. To get this number with electric fencing costs little.

Machinery

Spend more time on pre-use service and general maintenance. Good, useful second hand equipment is becoming more valuable, so look after yours and sell your unused equipment and scrap.

Milking Plant

You should have installed the best during good times so it is now imperative that you maintain it in top condition. Liners and rubberware must be maintained as new for efficient milking and hygiene, to avoid grades and to produce a top market product which our industry is crying out for.

Oil recirculating mufflers save oil and vacuum pump wear. Your vehicles are checked and serviced at least twice a year. Is your milking machine?

Electronic diagnostic recorders have been developed for testing milking machines; your income earner can't afford less.

Vehicles

Is your \$35,000 car justified? Interest on it is costing you at least \$6,000 pa. Does your truck justify keeping? Calculate both. Do your own oil changes and servicing.

Security

Keep things locked up.

High power electric fencing and an alarm help keep animals in place and discourage intruders.