Learn from reading, and from others, because from experience is expensive and slow.

Acknowledged copying is allowed & quoting is encouraged.

There is a strong demand for experienced, practical agricultural consultants worldwide.

If you would like to increase your income and get tremendous satisfaction, do agricultural consulting. I would like a good one in each farming area of New Zealand, Australia and other countries, to whom I could refer farmers, to reduce my work load which is causing me to work longer hours now than ever, and taking months to answer some emails. I've been trying for years and can't think of any way of reducing it, except to find consultants to whom I can pass inquiries at no charge and for no commission.

The demand for consultants who cover a wide knowledge from subsoils to death duties, is so great that good ones can soon get a hundred clients. We have 300. I've given 150 away to new consultants.

Some 'establishment' consultants who have had only university education before working for advisory and livestock organisations, etc., have caused farmers to complain to me that all these say is the sky is blue, and their advice is to milk more cows and apply more urea, both of which have lost farmers thousands of dollars and increased pollution. See Elements > Nitrogen and the spreadsheet 'Dairy cow numbers for max profit'. In 2014, it costs NZ\$1,500 to own and milk a cow, so every one too many reduces your profit and reduces the overall profit when the other cows are not fully fed.

My aim is to record honest, practical information in GrazingInfo for farmers and consultants to use as required, and without worrying that someone was getting paid to sell you something which may not be the best one for you, which is happening in 90% of cases in one way (commissions) or another (sponsorships by big fertiliser companies to Ruakura, MAF, AgResearch, DairyNZ, etc.

I have been lucky to have learned from a two year commercial course and then a two year practical farming course at Weston Agricultural College, on a 1,000 hectare mixed farm near Mooi River, Natal, South Africa. We students did all the work so learned in the best way possible. There were five groups that rotate every week.

Know your clients

The first thing a consultant must find out is the farmer's farming aims, such as high stocking, breed. They will be hard to change, but if they are strong and limiting, then be careful about consulting for them for too long. Examples are those who have inherited a farm passed down from generations, but it is not big enough to be profitable, and those who marry their farms. By this I mean are so tied to their farm that they are not prepared to sell it for a larger one.

Despite the above, one of my best dairy farmer clients had 40 hectares, a good home with a pool, and 100 excellent cows, and wanted to continue doing this forever. At 73 he still is.

Another was comfortable with a top pedigree herd of 100, and sold bulls and his cull cows for \$2,000 each.

Small farmers are more inclined to seek consultant help, so see Small Farmer Suggestions in GrazingInfo. A very small farm can graze goats or deer. Large farms where staff is not available, or not favoured, should farm cattle and/or sheep.

It is also important to find out early in the first meeting how intelligent the farmers are, and how much they know. Let them do the talking by asking them questions. Ones who grasp things quickly don't need lengthy descriptions.

Most importantly, involve the wife in as much as possible. They are more inclined to use computers and to accept and try suggestions, whereas some men need a lot of persuasion. I know also that many women are successful farmers in their own right, and are more open and more receptive. Some carry the farm.

Consultants should not give farmers solutions to all problems, rather teach them how to think, plan and solve problems themselves, or, using an old parable, don't give them fish to survive for a day, teach them how to catch fish for a lifetime.

Whether teaching or advising, many farmers return to old habits or slow down in their progress unless reminded on a regular basis. If a farmer has been making the same mistakes for 20 years, say from 16 to 36 years of age, changing will not be easy, and maintaining the change will be even harder. Fully explaining the reasons and benefits for doing things, and quoting farmers who have benefited

from doing so helps, but regular visits by a consultant, and/or belonging to a good discussion group which meets monthly, is the best, because some in the group will say what needs to be said.

I sometimes react impatiently, but shouldn't. Once a farmer who had been using soil tests for 40 years and only knew the recommended figures for pH, repeatedly asked about it, even after my consulting for him for years and improving his soils, pastures and animals, until I blew my top, and I think shouted, "Don't use that word again. It is useless and has cost you dearly and lost farmers millions of dollars!" He didn't repeat it. See pH.

Sum up their level of intelligence, memory, understanding and energy, and don't try to work beyond them. Keep things simple.

I found that if you go beyond their limitations you lose them, and they don't respect you.

At the same time look at the whole picture with them, even if they were not doing so, because, if there is one weakness, it can slow the whole program.

Experience

I milked cows on and off from age 12 until 30, grazed beef and goats with our share farming son-in-law and daughter on our second farm and grew maize for grain and silage and reared 160 calves each year.

I then consulted and marketed for farming companies making electric fencing, farm machinery, milking machines, calf rearing equipment, seeds, irrigation, fertiliser, pasture dry matter measuring, and agricultural universities, in many countries, and learned from them all.

No one person knows everything, and even the best managers, or even entrepreneurs can't know everything, but they and consultants need to know where to find information and what is needed - from the best plumber to the best lawyer (attorney) for the particular problem. On this point, don't rely on one lawyer for all things because sometimes a specialist is needed, for example property conveyancing. Lawyers ignorant of the finer details have lost lots of their clients' money.

Farm discussion groups can help to find answers, such as the best pasture varieties and forage crops **for your area**, where to hire a chisel plough or spinner drain digger, or the group buy one, rather than overcapitalise (a frequent profit killer today), the best contractor and vet in your area, the best accountant, etc. When using the best, one can feel more secure because now one has to know so many rules about the environment, resources, animal rights, effluent management and staff employment. Last but far from least, is the necessity to put it all together for the highest possible profits with the help of best consultants using the best software. Using the best local farmer as a mentor can be a good way to help achieve the above.

Discussion groups run by DairyNZ and similar 'establishment' type people can lack a lot. Many have given up going to DairyNZ discussion groups. Forming your own group of similar farms is the best. Five of us did this around Gordonton in 1958 which worked well. Two of us won Waikato provincial farming awards.

In the 1950s there were only a few dozen private consultants in NZ. Now there are 900.

Some vets did wider consulting for feeding and overall animal health, which was good, because a vet can't fix cows that are badly fed on bad minerals or deficient pastures. Unfortunately one vet made a lot of money by talking farmers into buying mixer wagons and feeding concentrates. Her client went broke and lost her farm. More recently, some vets seeking easy income, have started selling subsoils with a few additives in minute amounts and organic type names, at about \$800 a tonne, with a value of only a quarter that. Before buying any new product, get its analysis and enter the figures into the spreadsheet called

Bought feed in New Zealand unprofitable

Feeding bought supplements is highly unprofitable when our milk payout is half what it is in many northern hemisphere countries, where they still go bankrupt, even in Canada where the subsidies are highest and no milk is allowed to be imported to compete with theirs.

Consulting has in some cases become fairly specialised, so some farmers have more than one consultant. Users of their services are able to compare their various costs with the consultants' averages, which is very useful to ensure that money is not being wasted in any particular area.

The demand for private consultants who cover a wide area of consultancy is so great in NZ that

good ones get 70 clients within a year, and handle over 100, preferably with some in discussion groups.

It is interesting that many of the farmers who use consultants often need them the least, and those who need them the most don't use them, and sometimes resign from discussion groups.

Charges

These can be NZ\$80 to \$100 per hour from leaving the office until returning, plus travel at 80 cents per kilometre. Combining visits in the areas helps keep travelling time and mileage costs down. Having groups of up to six farmers means that different farmers can be visited each time, sharing travel costs. Farmers in groups learn the most, do the best and give me the most satisfaction.

The following from a consultant on the internet is so true. "When I charged \$25 per hour people treated me with contempt, and made excessive demands. When, for exactly the same kind of work, I charged \$80 per hour, I was taken more seriously."

I found the same, and at \$80 per hour have never had to advertise, and I turn away a farmer a week. In USA the charge was US\$1,000 a day, but I had the costs of getting there. I have a waiting list there

Consulting is a possibility for the many top farmers who wonder what to do when they get tired of doing the farm work, or can't do much through injury, or their children taking over the farm. It is also a possibility for a young person when there is no work on the home farm. A degree in agriculture is not necessary, but knowledge and consulting skills are. I got 99% in dairying at agricultural college when 17 in 1948. Cows were milked by hand then, so it could not be used as a lever to get work 70 years later. Farmers want tomorrow's ideas, not yesterday's.

I have trained many to do consulting in several countries. All thought that they couldn't and were really surprised when they found that they could. Most people can do anything they set their mind to, obviously within certain limitations. One was intelligent and added to what I taught him, so is still very successful. One was good, but gave up through his inability to persevere. He has had about ten jobs in as many years. Another was lazy, so continued with just a few clients. Another kept to his old university beliefs and a few way out beliefs of his own, so had to spend more time canvassing for clients far and wide (300 km away) than earning money. The worst was dishonest, so I dropped him quickly before he blamed me for his failures. Most wanted commissions, so could not be honest.

A problem is that in some cases a product is recommended by name for reward, so farmers think that all consultants do this. In Australia consultants of any kind are not allowed by law to get any commission or reward. In New Zealand this is not the case, so most get commissions from soil testing in New Zealand and get more from USA laboratories, and from fertiliser companies. NZ Finance companies gave commissions to their consultants, who then recommended the one that gave the highest commission, not the safest one. Investors lost thousands of dollars when many went bankrupt.

It is imperative to recommend the best known products to clients to save them time researching, and to ensure that they get and use the best ones. This is what consultants are paid for. An example is fine reactive phosphate (RP) where the best (with elemental sulphur and in acid soils) are cheaper and almost as fast as sulphuric acid treated phosphates (superphosphate), while the worst coarse RP from Egypt can take up to 40 years for all to become available.

To be successful a consultant must teach what the top 5% of farmers are already doing successfully. The best research information is what the best farmers have been doing for ten years.

Good consultants must be honest, teachers not doers, and not agents who expect to keep getting commissions.

At my first visit I tell the farmer that I'm a teacher, and if I haven't taught them all I know in two years, then either I'm a bad teacher or they are bad learners, so either way, it is time to go our own ways. Some have become highly successful and became good friends so I continued helping them for decades.

Visits

Ask the client their short and long term plans, and if necessary make suggestions. Remember clients' personal and family ambitions, preferences and attitudes, and that holidays are important for them and their staff.

Plan for being on each farm for about half a day, or, if it is a close group, perhaps do three farms a

day.

Each time, when going to farms look for a couple of things to admire. "You have reared your calves well", "You have clean milking shed, or improved your, pastures", "You have a nice home", and/or farm dairy, herd, etc.

Early in the piece, visit farms during milking, moving animals, drenching, etc., so you can observe animals and the farmer's handling, and give tips. On one farm a farmer had been applying clusters the rough way for years, and on a rotary the milker let the cow pass him from left to right then took the cluster from the left and took a step back to the right to apply it, instead of taking the cluster from in front of him and applying it as the cow passed. Crazy, you might think, but he'd been doing it for six months when I visited him, simply because he applied the first one that way.

Another example of wasted time and effort is when attaching an implement to a tractor. You should get off the tractor on the left and attach the left lift arm first, then go around behind the implement, checking it as you go, and attach the right tractor lift arm, which can be adjusted up or down to go on easily, without having to lift the implement and wreck your back. Then attach the top link by using the hydraulic lift, which, on most tractors, can be reached from the back right.

NEVER put a finger through a hole to check its alignment. Something may move and your finger will be stuck or chopped off, and never get in any position where you can get jammed. If someone else is backing the tractor, keep clear and then follow the above routine, and never stand between the tractor and implement. Feet slip off clutches.

There are usually (not always) better profit opportunities from improving the farmers' present farming types than diversifying, but if the farmer is tired he/she may need a change. Many northern hemisphere dairy farmers are tired, and even 'brain dead', through having milked and worked long hours 365 days a year for decades, but they will never change to another form of income, because they feel they know nothing else. Getting them into a good group could help solve it.

Implementing your plans

Planning is easy, implementing a plan is much harder, and requires discipline. For you to succeed you must ensure that your clients carry out the essentials.

Those who keep doing the same things and hope for an improvement are showing signs of madness, so are unlikely to succeed.

Companies and business people using consultants are usually proud to mention this because it is a sensible thing to do, while most farmers are less likely to mention that they are using a consultant. When a business person becomes a farmer they'll usually seek knowledge and advice extensively, but old time farmers want to be recognised as a successful self-made farmer, who can beat others at farming. So consultants should not expect recognition, even if they save a farmer from bankruptcy.

Many will thank you, but tell everyone else how they fixed, solved and did things. However, there are a few exceptions who will crow about the good of a consultant, especially if they have previously used a few others who have been of little help. Farmers, being people, have short memories, so can forget the source of the information and at a later stage tell you about an idea you suggested. If they do, remind them who told them.

If things go wrong, even if through no fault of the consultant, the farmer grapevine will be told that it was the consultant's fault. This grapevine is a powerful transmitter of mainly bad news.

Good farmers are accustomed to 'reading' animals so you must appreciate that some could read you, so be open and honest.

Consultants can learn from this. The first thing is to watch for dishonesty. If even the slightest amount is detected or discovered in a client, make an excuse to give up consulting for him. If you don't, and things go wrong, you'll be blamed.

Consultant's check list

Always take your computer to be able to look up records, show photos, make brief notes, use the GrazingInfo spreadsheet to calculate the optimum number of cows to milk, etc. If this consultant in India can, you can! With an





iMac and in a carry bag at about \$130, as shown, which is available even for the 27 inch iMac. I designed it and it is made by <u>Duncan's Canvas</u>, 28 King St, Box 9067, Hamilton. Ph NZ 07-847-4540. As with other items recommended, I get no commission. Otherwise take a lap top, but they cost more, don't last, and can be harder to read.

Take a sharp spade and pocket digital camera with you always, and photograph soils, earthworms, pastures, animals, etc. One farmer said that the photo I showed him of how sick his animals WERE, was not his, until the background was pointed out. With digital cameras the cost of photos is nothing, so take plenty and delete unwanted ones.

Examine soils, structure, earthworm numbers, fungi, mould, moisture content, depth, etc. Know soil health symptoms.

Check pastures for deficiencies, root depth, legume nodules, nematodes, denseness, thatch, moss, drainage, pugging. Ask the farmer when the leanest period is for pasture. Know pasture deficiency symptoms.

Eye assess pasture cover (the shortest 33%, middle 33% and longest 33%, and average them), percentage of clover, weed population. Do a feed budget and growth rates and grazing management.

Check water troughs. Read Water. if animals are lined up waiting to drink, dirt, flow, size and location (not under electric fences or in corners). If cows lick at water, it could be dirty or unpalatable from high manganese or iron.

Check herd's health. Know animal health symptoms. See liver and blood test figures.

The asterisks * after these below indicate ones that have Excel spreadsheets.

Milk production, somatic cell count or beef weight gains* and conception rate.

Optimum number of cows to milk*.

Calving to match pasture growth*.

Check milking equipment (no current flows) and milking system.

Number and type of animals and their condition*.

Monitor heifer growth rate. See figures*.

Calf and heifer rearing costs*.

Check subdivision with electric fencing and perfect earthing.

Take pasture tissue analysis and recommend fertiliser mix.

Sort out the urgent jobs from the unnecessary.

Interviewing staff, share milkers and share farmers. Help with just the short list.

Lease agreements*.

Keeping records from each visit of Farm Statistics*.

Pasture and crop seeding rates*.

Measure silage on hand for feed budget*.

Costs of growing pasture and crops*.

Returns from fertilising*.

Financial budgeting*. Overdrafts cost more, so should be the lowest possible by increasing the fixed loan if necessary.

Ensuring that the farmer allows enough money for the family.

Helping set out a curriculum vitae (CV) Profile or Personal Review of education and work records for borrowing from banks, or for later when changing a profession.

If all aspects are not monitored, the most costly one could reduce funds for improvements.

Always under-promise and over-deliver, and you'll gain credibility and loyalty.

Fertiliser advice essential

The highest annual bill on most New Zealand pasture farms is fertiliser, so independent skilled advice on fertilisers is essential, and must be sought, not from fertiliser company sales people, but from independent specialists. We've all heard of Ali Baba and the Forty Thieves - well in the earlier days of motorcars which frequently broke down and were difficult to repair, and owners knew little about them, the saying changed to Ali Baba and the Forty Garage Proprietors. Now it's changed to Ali Baba and the Forty Fertiliser Vendors - not that all fertiliser companies are at fault.

Farmers have noticed that some large fertiliser companies sponsor research, so they fear the

possibility of biased recommendations.

All farmers know about simple NPK, and are brought up with it, but, unless they went to a good honest agricultural college or honest university, they don't know how to calculate the ratios. They are then 'helped' by fertiliser salesmen who want to sell their employer's high profit making potash, urea, etc., so twist figures to suit. Balance Fertilisers make most of their profits out of urea, so promote it, and even get DairyNZ, which is 100% dairy farmer owned (costing the farmer about \$10,000 a year) to help them sell it.

Then, after farmers see that the basic NPK fails, silver bullets become the solution! So when farmers get sucked in, we call them gullible, which is part of their being nice, honest, trusting people.

In New Zealand, they've survived without subsidies, with high costs increasing, the worst from local bodies and banks cheating them, including higher interest rates than to townies. From 1950 to 1970 farmers' rates were lower. In Japan farmers pay 1%, townies 3%.

Despite being subjected to strong commercial 'lies', most NZ farmers sort out the grain from the chaff, and are successful, having doubled pasture, animal and production per hectare, and increased cow numbers per farm by six times (60 to 380) in 50 years.

Also, those who subject them to what are commercial 'lies', are trained sales people with qualifications. Some are vets, scientists or academics working for fertiliser companies.

They spout learned phrases such as "Saturated Base" in fertilisers, that make farmers feel out of their depth, so they trust them for their "knowledge".

Most agricultural sales people are selling fertilisers, medicines and chemicals, in many forms, that vary from good ones to useless expensive disasters.

As you know, most subscribers by far, from one hectare owners through life-stylers to massive ranchers, who joined grazinginfo.com did so because they have been unhappy with the old NPK, and others, and saw they were getting nowhere and perhaps experienced costly failures.

I mentioned 'honest' university above. When promoting Gallagher fencing overseas I went to universities to 'teach' them controlled grazing and pointed out that they should be doing for their farmers what I was doing. Most were receptive. One professor in Slovenia was so enthusiastic that I appointed him as the Gallagher importer distributor. He still is, and his son is taking over. In USA ALL university professors replied to me, "Give us \$100,000 and we'll prove anything". I've been told that Ravensdown Fertiliser Company gave Massey University \$5m in one year.

Why are some gullible? After the basics fail, people can naturally look elsewhere at alternative medicines and at alternative specialists, some of whom are excellent, because they are not locked into the medical and veterinarian closed shops of high profit items. However, high pressure trained sales people cash in on the opening. Most farmers are down to earth, solid, genuine people, not academics, so some academics convince them with flowery phrases galore.

Confused

The fertiliser industry and research have successfully confused farmers on fertilising, and the pasture seeds industry has done the same by spending most of their time, when calling on farmers, attacking opposition products, rather than promoting the benefits of their own varieties, and telling farmers how to get the best from them. Good consultants can explain the benefits of various fertilisers and pasture species and varieties to their clients. The money the farmer makes from buying the best ones can pay for the consultant.

New Zealand research and experimental results going back to the National Fertiliser trials and earlier ones reported in the NZ Journal of Agriculture in March 1982, showed that, on Northland soils, peats and pumices, farmers could save up to \$28 per ha per annum by using Gafsa reactive phosphate. Savings are also possible on other soil types, but not on alkali (pH above 6.3) and dry soils. Despite this, most consultants in appropriate areas still recommend superphosphate, and more recently DAP, which is even more soluble and prone to wash down hills onto flats and into waterways, and more prone to leaching.

The Winchmore Irrigation Farm, South Island, have shown that pastures that have been fertilised with Sechura (Gafsa is close to it on an equal dollar basis) for 12 years are more dense, have more clover, and fewer weeds, than those fertilised with superphosphate, and the RPR cost less. Many farmer trials have found the same thing.

The lack of a straightforward statement on this topic by AgResearch has thoroughly confused farmers. There are many possible reasons for the silence.

Confusion is added to, when soil or pasture samples show that potassium levels are higher than necessary, and yet some advisers continue to recommend that more potash be applied.

Many farmers who reduced potash, or eliminated it, some years ago, have increased production at a faster rate, without the excessive bloat and metabolic problems. Calcium (agricultural lime - CaCo3) and sodium (coarse 4 mm agricultural salt) can reduce costly potassium leaching. If a consultant doesn't take pasture analyses before making fertiliser recommendations, then the farmer should seek one who does.

There are fifteen important elements which have to be measured and corrected to ensure optimum soil, pasture and animal health, which lead to profitable production. Few can be measured accurately in the soil.

Veterinarians

Veterinarians in some countries act much more as preventative consultants, rather than as bandages. They work with farmers, agricultural consultants and feed specialists in planning healthy animals. In New Zealand some veterinarians are now following this trend, and increasingly expanding into the category of consultants, with some providing excellent information.

There are twice as many veterinarians in the Waikato now as there were in the 50s, while total stock numbers are much the same, but animal health problems have increased out of all proportion because of soils becoming more deficient in trace elements, following the increased application rates of the growth elements of N, P and K. Also there are now more animals per hectare, per farm and per person, and few farmers analysing what their animals are eating (pasture), then fertilising with and feeding deficient elements. Under high stocking rates, perennial ryegrass becomes the dominant or even the only grass in a pasture, whereas a few decades ago there was Cocksfoot (Orchard grass) with double the iodine of ryegrass, Timothy with four times the magnesium, Velvet grass with double the selenium, Plantain with four times the calcium, double the sodium and 50% more copper, yarrow and dandelions with three times the boron, cobalt and iodine. I've seen cows deficient in minerals rush into paddocks with dandelions and eat them first, right down to soil level. A farmer told me that the milk always went up in his dandelion paddocks. This doesn't mean that you should grow them, but should have variety and feed the best minerals through the water.

In recent years some vets have seemed mostly concerned with clocking up as many visits as possible and selling their products, with some attacking good products because they don't sell them.

A good independent consultant who doesn't sell anything can help clarify matters in this quarter. There are books on all vet topics, but no consultant should try to do vet work, but should know how to achieve top animal health through fertilising and feeding.

Farmers

Agricultural consulting is also dealing with farmers. When talking to them, it is useful to praise and compliment them on things they are doing right, before going on to give them advice.

Most farmers are a breed of their own. Some like to be seen as self made successes; however, on their own, it quite often takes them longer to become successful than with useful advice. If you can help a farmer succeed and let him think he is doing it, even if his wife is helping, you'll have a job for life. Some of the "self made" types, while they will gladly take advice when down, as soon as they think they can cope on their own, they'll drop their consultants.

Knowing this is one reason why I aimed to consult for most clients for only two years. There is plenty of consulting work available. A few clients, however, are still happy with my help after 40 years. Working with them is most enjoyable and rewarding, as long as you're not over sensitive.

Most farmers pay their accounts, most amazingly quickly, but a few quite slowly. In 40 years, more than 200 clients and thousands of accounts, I've had to give only one to the debt collectors, whereas about 5% of town clients are bad payers, and some are non-payers.

Farmers have to be masters of many professions - soil, pasture species and management, fertilisers, fencing, animal handling, tractor driving, cultivating, maintaining animal health, etc.

On the clerical side, they have to have accountancy knowledge, because, even if they use a

professional, they still have to have a rough idea of how much tax they should be paying, and it is essential that they are able to check the figures. Our accountant in 1960 made an addition mistake of 100% which doubled our income tax! Luckily, I knew that it could not be that much, so he re-checked and found his mistake.

Farmers also need to have legal knowledge, to know what their rights are regarding drainage outlets, boundaries, pollution, spraying requirements, employment contracts, etc. If they had to ask their solicitor each question the costs would be excessive.

Few people can have sufficient knowledge in all these aspects, so they should seek sound specialist advice from consultants - ones who explain the reasons and background for their suggestions.

In practice, there are farmers who are good on the mechanical side, and not so good at animal husbandry, and vice versa. The important point that farmers and consultants have to decide is the categories where help is needed. In some cases farmers like to be able to have consultants who can assist with all aspects, or sometimes just someone to bounce ideas off, and to get that ever-important second opinion.

There are different farmer types -

Pasture farmers - within these there are those who like to have plenty of feed ahead (low animal production), and those who like the feed in the animals (higher production).

Machinery kings - an endangered species, unless they employ good stockmen and do contracting to justify the outlay on equipment. A machinery king should not farm animals like goats, which need considerable time.

Stockmen - like to spend plenty of time with stock, have few tools and machines and are usually highly profitable.

Gardeners - have tidy minds, tidy farms and are organised. These prefer cropping, which they can control, rather than animal farming.

The first visit to some farms can be quite horrifying when some of the deficiencies are seen, such as never having taken a pasture sample, never used trace elements although known to be deficient in the area, unhealthy animals, milking machines not serviced for years, under-feeding and/or overgrazing. At the first visit take photos of animals and pastures.

Taking photos is important for your records and because the farmer will often forget what the pasture, animals, etc., were like before you started consulting for him.

A high proportion of farmers like to fully discuss fertilisers, pasture analysing, pasture species, animal health, stocking rates, etc., because they have become confused by the varied information and commercial advertisements on these topics.

New Zealand's low per cow production is mostly through overstocking. A consultant with the right computer programs (feed budgets, costs of owning stock, etc.) can help determine the optimum number of livestock to farm. Some correctly stocked farms produce nearly double the national average per cow and per hectare, with vastly higher profits. It costs about NZ\$1,500 to own and milk a cow on pasture for a year in New Zealand, so it is imperative to computer calculate the optimum number of cows to milk for maximum profit, and feed budget with a PastureGauge or eye assess (some devices are worse than eye-assessing).

A percentage of farmers see continuing improvement in their farming policies as the spice of life, but unfortunately too many are over cautious, waiting to see on-farm benefits next door before responding to good ideas. This is a reason why most farmers still use NPK fertilisers without even trying proven RPR's, lime, salt and trace elements, which, in many cases, are achieving far better overall results, especially in animal health.

Farmer cautiousness is also the reason for so many continuing with soil testing, whereas pasture analyses are much more effective and profitable. These have been used by the best farmers for 40 years. Unfortunately consultant ignorance of how to take, read and use a pasture analysis accentuates the problem, so, while it is important that farmers seek up-to-date independent advice, and they have never had a better selection of advisory services to choose from, they must sort out the wheat from the chaff.

Sometimes what appears to be a stubborn resistance by some farmers against change is actually because MOST people need to hear and/or see any completely new idea more than once (usually from three people) to understand and accept it. Remember this when listening to people and when talking

with people, and don't be surprised when farmers come back to you with something you told them sometime ago. It is because when they heard it the second time, perhaps from someone else, they accepted it. Consultants should confirm all suggestions in writing, to ensure that what is said is recorded, and at the next visit go over the report before doing anything else. Some farmers don't read reports sent to them, so keep them as brief as possible.

Almost all farmers benefit from the help which a consultant travelling around the area and getting ideas from various farmers can provide. The best farmers can do well, after the first year or two, with one visit a year, while some farmers need ten visits a year for ever. Some need regular and continued support to maintain their confidence, others to ensure that things are done on time. It is up to consultants to recognise each category of farmer and to act accordingly.

Any farmers who are not good performers should not be taken on or should be dropped, because you will get the blame when results are not achieved. One who will never "walk" pastures with a spade will be at a disadvantage. In some countries if a farmer can't do things from a vehicle they don't get done, period, so walking pastures is seldom done, and fencing is never done unless by contractor. This is a shame, because those who walk put on less surplus weight, live longer, and see more of what is happening on the farm a long time ahead of those who ride around the farm. Pickups are for transport of goods, not for farm inspections. When buying a farm you walk with a spade to check the soil you are buying. Do the same after you own it, on your own and with your consultant.

Good farmers are accustomed to 'reading' animals so you must appreciate that some could read you, so be relaxed, open, skilled and honest.

It helps me is I slow down a bit and listen more, and not be forceful unless essential.

Discussion groups

Those in the group soon identify the successful farmers and listen to them, and ignore the empty cans, which frequently, as the saying goes, make the most noise. The convenor has to learn to encourage the good ones to comment and limit the empty ones; however even the latter can have good ideas. Never assume.

Generally farmers prefer ideas which come from farmers, however a good consultant can quote things used by farmers in other groups. Ex farmers have a big advantage.

A major benefit of DGs is for all to see other farmers under pressure during spring calving and other stressful periods (too much snow or rain, too dry, too much pasture, or no pasture). All can then joke about catastrophes and stress. These therapies help all concerned.

Most farmers like controversial points to have a conclusion, and this is where a good convenor or consultant can help. Try to have the group come to conclusions, and not just flit from topic to topic. Some, if not interested in a topic, may bring up another before the first one has an answer. Avoid this.

One domineering, lecturing or conceited member can ruin a group. The consultant must control them and avoid these traits themselves. Criticisms must also be controlled. People must talk about the system, not the person, for example "With this system what plans do you all think should be made to avoid running out of pasture?"

Ask questions like "Could you run out of pasture?", rather than say "Joe, you are going to run out of pasture, what will you do then?"

Another example is "Why do you feed silage in troughs and not on pasture?" Not "You should feed silage on pasture, not in troughs." The farmer concerned could have an excellent reason for doing so.

At the same time, if something is observed or said which someone, especially the consultant, believes is wrong, they must correct it. If not, all could believe that others thought it a good idea. Once, when I was running a field day on a client's farm, he said something in his address to us which I knew was completely wrong. I ignored it as being ridiculous. Some time later another client in the group did the thing concerned (it was so stupid that I can't even remember what it was). I asked him why he did it and he replied that it had been recommended at the field day I ran. Since then I try to not let what I believe are wrong statements go without questioning them.

I've been told that in the 50s there were many discussion groups operating in USA, but they ceased for some unknown reason. I wonder if it was because of the polite North American manners, whereby people ignore rather than question wrong statements, and do not pass judgments; as a result

very little is achieved. New Zealanders can be the opposite, with many too inclined to question and comment ruthlessly, for example "Where did you learn that idea, Joe?" followed by a laugh from most. It wasn't a question, but a facetious statement, aimed at trying to be clever.

I've run DGs in Japan. They are delightful. 99% come with notebooks. Many will say "Vaughan san, (pause - a sign of good manners) may I ask a question please?". "San" is an address of respect. "Highly respected older friend" (young Asians respect age) is the nearest meaning I can give it.

The Japanese have a wonderful way of getting messages across by asking questions gently and generally, so as not to point the finger at anyone, and they don't "lay down the law". They may say "Joe san, (pause) I'm sure that the group will be interested in this idea of yours. Can you please elaborate on it?" The others may think it's useless, but would not show their feelings. Joe feels good, and can then easily explain that it is a mistake, without losing face. Westerners paint people into corners, so the person then comes out offensively defending himself, and no one gets anywhere.

Another problem Westerners have is that they are inclined to "get their own back" (revenge) by criticising or finding fault with someone who has previously criticised or found fault with them. Consultants should ensure that this is avoided by having a handout with suggestions of how to behave in a group, and also by stopping the first critical comment in midstream. Animosities can develop if not prevented. If this does occur and can't be stopped, one of the two can be encouraged privately to join another group. If they are not separated and continue nastiness, good people who can't stand that type of behaviour are likely to leave the group.

In one New Zealand group I ran, one farmer was way below the others in ability, production, energy and profit. He was a really nice guy and we all wanted to help him. The result was that on his farm there would be a ton of suggestions of how to drain better, rear better heifers, cull useless cows (he loved each one), etc. He left the group, but he needed it more than all the others put together. I should have foreseen the problem and told the group when he was not present (he was mostly late) "Softly, softly - catchy monkey."

The consultants can make or break a group. They must run the group discussion as they walk around the farms as they would formal meetings, have an agenda of seasonal topics, lead the discussion and encourage solutions, not negative statements.

After the first fifteen minutes of gidday, how are you, how's your new baby, isn't the weather bad, what shall we do with this government, etc., private discussions must be stopped.

Whisperers need to be asked nicely to please talk a wee bit louder so we can all hear. They will usually then speak up. If they were saying something irrelevant, they'll stop. If something like this is not done, then those who talk, and those who have to listen to them, will later ask questions which have already been discussed while they were whispering to each other. People soon learn to behave as required.

The consultant sets the standard and most will respond to it.

Women in the group usually lift the standard, so should be encouraged, but men should not expect a woman to always be the convenor or secretary. Those days are gone, thank goodness. Some men benefit from being made to do secretarial work and some are excellent at it. Some just can't.

It is not easy for a professional consultant to keep a group going for years on end because -

- •The first years are highly successful. Members get more than their money's worth, but it is difficult to maintain the impetus. Some members forget the initial financial reward they gained and pull out. To overcome this, consultants must keep ahead by reading, learning, and running trials on members' farms. These are essential because they create interest, are more useful than all the scientific research on the same topic done all around the world, or at a university a hundred miles away. All members should be encouraged to run the same trial on their respective farms. You'll be amazed at the variation in results. Examples of trials include lime and no lime, lime at normal and double rates, the same for fertilisers, liquid fertilisers, trace elements, pasture species, drainage with spinner drains at 30 m (100'), 40 m, etc. apart. Many farms have poorly drained areas.
 - •Cliques form. Some want one thing, others something else.
- •The group can become just a social event. In these situations it is advisable to meet less often and/or bring in new members, but they must be ones who can contribute, or some in the group could feel that they are the advisers helping the new members, so should be paid, rather than pay to belong. All payments usually go to the consultant.

•New ideas are hard to find for a good group, but, if the consultant has other groups over a wide area, good ideas can be brought in. No one consultant or person has all the good ideas. Some good ideas come from physically lazy, but mentally bright, people who take short cuts. Not washing already clean udders is one, ad-lib feeding calves on saved cold colostrum, or once a day feeding calves after three weeks, are others. Which reminds me that labour saving ideas which work well for a good farmer may be a disaster for another. Examples are not washing calf milk drums and ad-lib feeding. Clean well preserved colostrum in clean surroundings in a temperate winter climate, fed ad-lib to healthy calves through drums and teats which are washed only once a week, can be successful with one and a disaster with another.

Invite bank managers, accountants, solicitors, veterinarians, top DGs, organic farmers, etc., to meetings during slack periods, and to generate interest and enthusiasm.

Ways to keep interest is to keep reminding members that 63% of the 13,000 New Zealand dairy farmers belong to discussion groups, and surveys show that production from those belonging is higher than from those not belonging, and their average cash surplus is 7% higher.

However, in some cases, good farmers see dairy co-op groups as superficial, too far behind the best, lacking in-depth experience (many of their consultants are juniors), pushing increased production rather than increased profit and lacking one to one complete help. Few co-op consultants stay at their job for long, which doesn't give the relationship some farmers seek. It is these factors which give private consultants an advantage, in that they usually cover many geographical areas and farming types, so can move information from one area and type to another, to both DGs and individual clients.

Consultants (and farmers) should also keep up with all the reading necessary to remain abreast of developments both within New Zealand and overseas. Some farmers read little, sometimes because of fatigue, so consultants can help these.

A good way to keep interest is to work out and compare each farmer's Farm Profit figures before interest and capital payments and personal remunerations. Figures from one need not be divulged to others, but can be compared with the average and averages from other areas. In New Zealand the top dairy farmers achieve about NZ\$2,500/ha (US\$600/acre). The average is well under half this. Top beef and sheep used to be about three quarters the top dairy ones, but are now much lower.

DGs are best if closed to new members unless new ones are invited after unanimous agreement. New members should be asked not to say too much or ask too many questions at the first visit, and then, after having met each member, to visit them for an hour or two to catch up with as much as possible.

Where the DG has members who are at the top of the grazing tree and ones at the bottom, they should be divided into equal level groups to avoid boring some and leaving others behind. Cross visits should be arranged about once a year.

We all bring lunch and have it in the dairy, garage or shed. Sometimes the host provides drinks.

Some US dairy farmers who have changed to grazing, and perhaps to seasonal supply, ask questions, and sometimes express a feeling of being out on limb. I can understand this, and believe that it is extremely important for grazing farmers to form discussion groups with other graziers, to learn from each other. In some areas the group will be small, and in some cases it may cover a wide area, but the efforts will be rewarding in many ways. Pioneers need support and to also learn from each other.

The best convenor is someone who has have chairmanship skills to allow all to have input, not just the most vocal, and must be open minded. If the convenor also convenes other groups, this will give experience in running them, contacts to visit other groups, and information from other areas. Members must be of the same farming type to have similar interests, have enthusiasm to improve and be open about what they are doing. Many mistakes are made in any business. Discussion groups can save the same ones being made by all members. Grazing types include low-input, medium-input and high-input. Whichever group you are in, it is important to learn about, and if possible, visit others, get their cost and return figures and compare them with yours, then do what-ifs on your computer to see what happens to the figures under low and high fuel prices and low and high payouts for your products. Visit those who grow forage crops, silage maize, on/off grazing using pads, etc.

Five of us started one of the first discussion groups just north east of Hamilton in the Waikato in New Zealand in 1958, now there are about 1,200 in NZ, varying in size from five to 15 farmers. New

Zealand is size and contour of Colorado, but that's where similarities stop. It has 11,000 dairy farms and only 70,000 farms in total, so the density makes contact easy.

Farmers can learn more from a good discussion group in their area than from anything. Belonging to a DG is a real benefit, especially for newcomers to an area, but generally localised groups perpetuate local practices, which may not be the best. So, after the first year, good farmers learn little from going round the same farms again and again. Occasionally visiting top farmers in other areas, and having a good consultant who covers a wide area, are essential.

A DG is usually run by a consultant, but must also have a convenor from the group elected annually. The convenor organises meetings and phone calls if there are changes. He has to phone only the first member on an alphabetical list, who then phones the next, and the last one phones the convenor, so he knows the message has gone to all. Two farms are visited each day and the 12 month schedule is planned to visit each farm in different seasons, so they don't visit the same farm in the same month each year.

The consultant, or in his absence the convenor, keeps the discussion on track, controls the domineering ones, encourages the quiet ones, and, most importantly, monitors production and cost figures to give useful comparisons between members. Figures must come from dairy company or beef weighing scale printouts brought and given to the consultant or convenor on the day. If farmers disbelieve memory figures which are given and are above their own, they will soon stop attending.

Groups should not be smaller than five and not larger than about ten farms. A five farm group could total 12 or 15 people if all spouses and staff attend, and it is best if they do. All owners should be encouraged to have all staff attend.

Groups of under five farmers can be too few, because members get tired of going around the same farms several times a year. To overcome this, it may be necessary to visit more farmers outside the area. Doing this by all DGs can be beneficial, because different areas have different ideas, some of which don't spread unless by personal contact.

The most important factor in a DG is to have the top farmer or farmers in the area in the group, or to invite them to attend occasionally.

It is important that all read all the appropriate chapters in www.grazinginfo.com

Procedure

The farmer introduces his farm and mentions anything relevant, including problems he would like help with. A typical introduction at a spring meeting would be - "Calving started on ..., 150 have calved, the remaining 40 are all due by mid ..., two had milk fever, one is a five day downer and the vet can't fix her, pasture cover is 1,900 kg DM/ha, we have started the second grazing round, production is 1.7 kg milk solids per cow, 60 calves are being reared, a few milk grades (mention the type) came as a shock and the reason can't be found."

Figures can be entered into a computer on arrival. A VJ template is available for this and can be adapted to any situation.

If a portable computer is not available (all consultants should have one) then go into the home where there is one. The half hour is not wasted. When farmers get together they have a ton to talk about, so they can do this while the convenor reads the figures to someone to enter. If the formal meeting starts immediately it is hard to keep silence and order. Let them get their excitement off their chests.

Discussions can include condition scores and health of cows, health of calves, quality of pastures and anything seen by members, and, of course in this case, an inspection of the milking machine, seeking reasons for the grades.

Beef and sheep farmers would give the appropriate figures and discuss daily weight gains, mob sizes, etc.

A topic worth covering a few times a year is Mistakes I Wouldn't Make Again. We all learn from mistakes and it is better if we learn from those of others. There are dozens of things I'd not do again or would do sooner such as -

- •Not rotary hoe soil more than once to avoid destroying its structure.
- •Give up mouldboard and disc ploughing in favour of chisel ploughing before I did in 1959.
- •Not sow pasture seeds too thickly, because it costs more and results in weaker plants, many of

which die before six months old. However, sowing insufficient seed can mean more weeds.

- •Not put a zigzag back rail in a herringbone when a straight one costs less and is better.
- •Not buy small rocks for the lane because it was cheaper per cubic metre at the quarry. It costs the same to cart and much more per square metre spread, because it has to be spread more thickly than the dearer, but smaller <12 mm (<half inch) crushed stone.
 - •Not buy gravel which is cheaper because it has clay in it. It is stone which is required, not clay.

Some in the group help each other out during holiday periods by milking each others cows, etc., so that families can take their annual vacation together. Good friendships develop.

For discussion groups to succeed the following are important -

- •Think of yourselves as co-operative colleagues, not as competitors. Many dairies are closing. If all close in your area you'll have to close too, so help to keep each other going profitably.
- •Honest production figures must be given. Ours take their daily milk docket along to eliminate the temptation to round figures upwards too much.
 - •Everyone must think and talk solutions, not problems or objections.
- •All comments must be positive, and ones which could be construed as being critical should be accepted gracefully and gratefully.
 - •At least one good idea should be offered and discussed each time.
- •Set starting and finishing times, and start on time. Have friends tell those who are late about what they have missed. Don't criticise them. They could have had a serious problem. Dry stock farms can start at 10 am and finish at 5 pm, dairies can start at 10 am and finish at 2 or 3 pm.

Farm walks

When going on a farm walk, aims must be decided on, for example -

- •Learn how to measure kg DM per ha (lb per acre) or update accuracies.
- •Check dry matter levels.
- •Do a feed budget for the next month or more.
- •Check drainage requirements in wet weather.
- •Check causes of pastures drying out in dry weather, e.g., species, fertility, shallow topsoil, etc.
- •Need for fertiliser.
- •Check animal health, mineral deficiencies, condition, feeding levels, contentment, etc., and learn how to identify these things.
 - •Learn how to eye assess animal weights and condition scores.
 - •Identify weeds and discuss controls.

Also have sessions in the parlor on milking machines and parlor designs (a good wet day item).

Farmers are great at making labour saving devices, so look for these while walking around farms and congratulate the farmer. He may have made it a decade ago and forgotten that he invented it, and others may not have one.

Enjoy your consulting. It can be extremely satisfying and comfortably rewarding.

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