

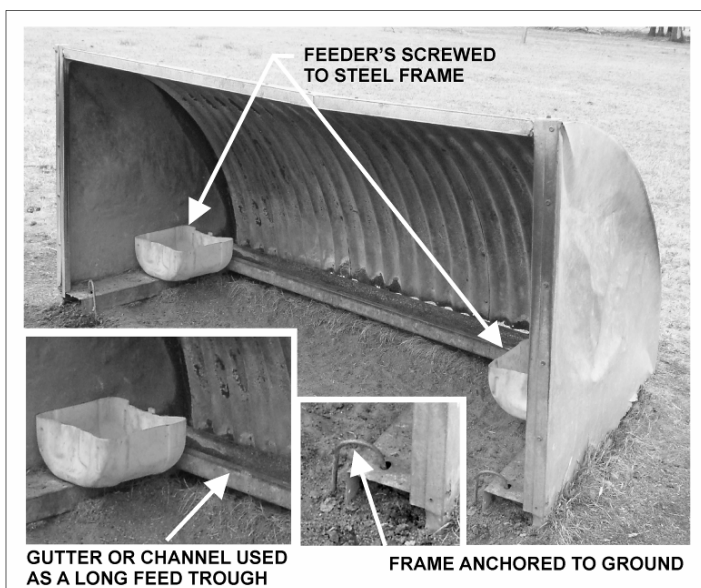
DIY FREE CHOICE LICK STATIONS



WATER TANK STABILISED WITH STAR PICKETS.
PLASTIC DRUMS SCREWED TO BEAN.
BEAN WIRED TO BASE OF TANK.

Examples of early Mortlock “Buffet “ models placed in paddocks to hold Vitec King Kelp Seaweed Meal and Pat Coleby Stock Licks.

These are still in use. The Mortlock’s have sheep, but the feeders are adaptable for cattle, alpacas, goats and horses.



GUTTER OR CHANNEL USED AS A LONG FEED TROUGH

FRAME ANCHORED TO GROUND

ADAPTED QUARTER WATER TANK ANCHORED

MORTLOCK MARK 2 BUFFET

1 TWIN DRUM CRADLE / SKID

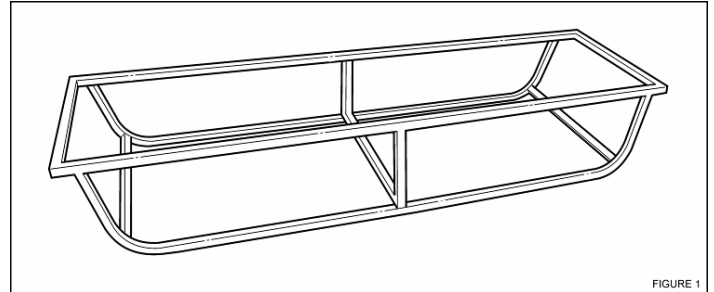


FIGURE 1

- CONSTRUCT CRADLE TO SUIT THE TWO DRUMS USED. (see figure 1). USE A PIPE BENDER FOR SMOOTH ANGLES, WELD JOINS THEN SMOOTH WITH ANGLE GRINDER. PAINT JOINS WITH RUST INHIBITING GALVANISING PAINT.
- CRADLE ALSO HOLDS A 200lt POLY WATER TROUGH.
- **VARIATION** – TO TOW, ADD SIMPLE AXLE AT ONE END, SLIP ON WHEELS AND HOLD IN PLACE WITH SELF LOCKING SPLIT PIN THROUGH HOLE IN AXLE. REMOVE WHEELS WHEN POSITIONED IN Paddock.

2. CONSTRUCTION OF LICK PROCTOR

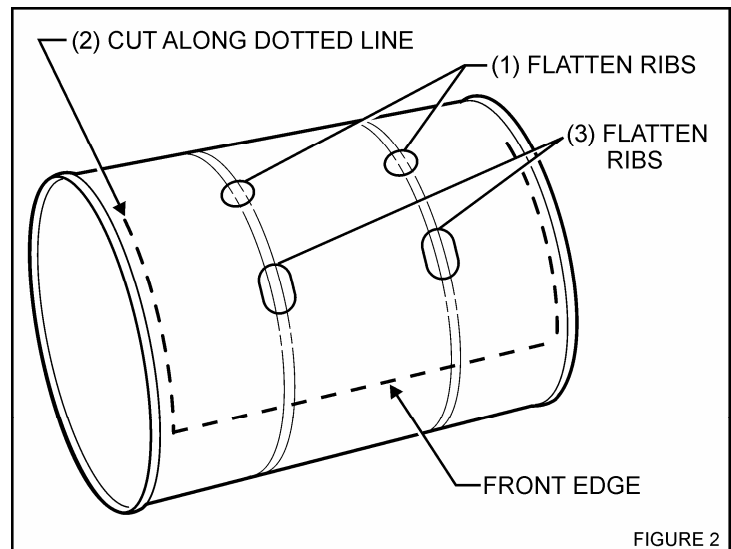


FIGURE 2

- ⇒ USE A HONEY/44 GAL. HEAVY DUTY DRUM (To prevent explosion or contamination **DO NOT** use old chemical or flammable liquid drum.)

- (1) FLATTEN RIBS WITH MASH HAMMER ON FOLD LINE
- (2) USING ANGLE GRINDER WITH FINE DISC OR JIGSAW WITH METAL BLADE CUT ALONG DOTTED LINE (see figure 2)

BEFORE completing cut, secure lid in original position with tie down straps or similar as the lid will suddenly spring open on final cut and could break blades.

- ⇒ FRONT EDGE, FILE/GRIND SMOOTH, OR COVER WITH SPLIT HOSE SREWED ON OR COVER WITH ANGLE IRON SREWED ON.

3 CONSTRUCT LID



- LEVER 'LID' OPEN WITH JACK, AS ABOVE. COUNT THE NUMBER OF LEVER ACTIONS SO THE TWO DRUM LIDS HAVE MATCHING ANGLES.
- PLACE LID OVER NEAREST LOG AND FLATTEN RIBS WITH FORKS OR FRONT END LOADER BUCKET (see figure 2 – '(3) flatten ribs' here) THEN IT'S EASIER TO ATTACH FRAME

4 CONSTRUCT LID FRAME

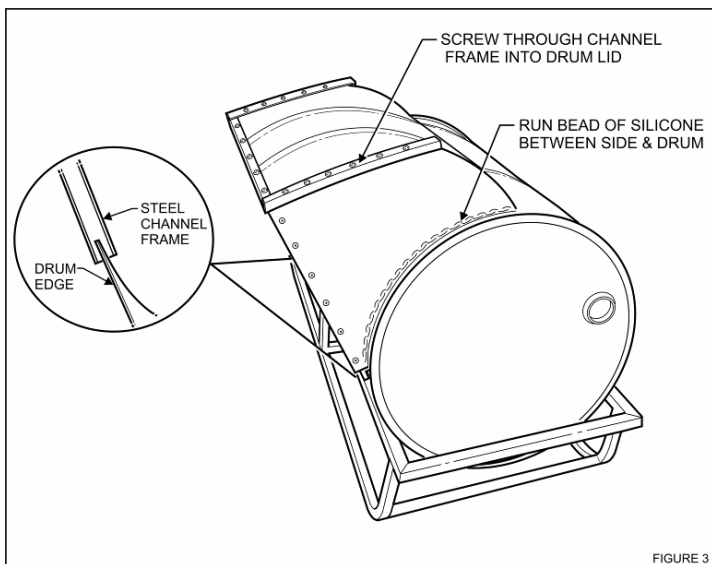


FIGURE 3

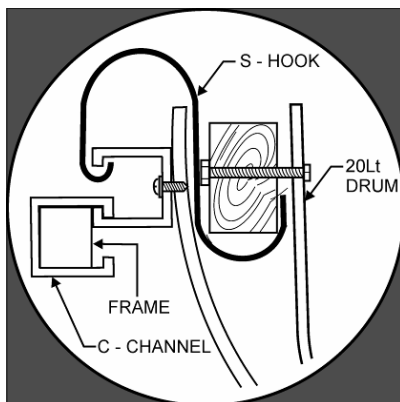
- MAKE FRAMES FOR SIDES FROM ANGLE IRON, BOLT OR WELD.
- UPRIGHT FRAME IS SPLIT AT BASE TO SLIP OVER EDGE OF DRUM (see inset diagram)
- TECH BOLT FLAT STEEL OR CORFLUTE SIDE WALLS TO FRAME AND INSIDE DRUM.
- SEAL JOINS WITH SILICONE TO KEEP DRUM DRY.
- COVER TOP EDGE AND SIDES OF LID WITH ANGLE IRON, ATTACH WITH TECH SCREWS.

5 INDIVIDUAL STOCK LICK COMPARTMENTS



RINSED 20 LT PLASTIC DRUMS ARE USED (**Not** old chemical drums). Sulphur will rust metal drums.

- USE ANGLE GRINDER TO CUT DRUM IN HALF TOP TO BOTTOM. A HONEY DRUM HOLDS 3 x ½ 20 Lt DRUM
- ALONG THE FRONT EDGE OF THE GROUP OF THREE THEY ARE SCREWED TO A LENGTH OF 1" X1" TIMBER See diagram below.



Detail of side elevation as marked in photo above.

TO HOLD FEEDERS

Screw 15cm length of C Channel to front of honey drum.

*Make S hook from flat springy steel that binds timber stacks/wool bales.

TO HOLD DRUM

C Channel on frame slides over bottom of C channel on drum to lock in place.

Cattle require deeper drums, only cut off a 20lt drum



THE FINISHED FREE CHOICE FEEDER



EASY TRANSPORT OF FREE CHOICE FEEDER

WHY DO STOCK NEED SUPPLEMENTS?

From time to time stock are unable to obtain adequate nutrition from pasture and conserved feeds. This can be due to cold, wet conditions in spring, summer drought, poor quality hay and silage and many other reasons.

Other stresses from pregnancy, metabolic disorders, calving and high milk production can compound the basic problem. On top of all this, soils that are acid or out of balance due to not enough fertiliser or too much fertiliser make the problem even worse.

The overall result is stock that are under stress, perform poorly and are prone to metabolic and other diseases. The main problem is often a LACK OF MINERALS, and particularly TRACE ELEMENTS, which are required by the rumen and gut bacteria as much as by the animals themselves.

A lack of minerals and trace elements is particularly damaging to young stock and to high producing animals.

How do I know my animals need stock supplements?

- ⇒ Anytime that your animals are under stress they may need extra supplementation.
- ⇒ Unfortunately you often you can't tell until it's too late e.g. it is too late if the stock doesn't fall pregnant or they suffer from birthing difficulties.
- ⇒ If there are obvious signs of problems such as excessive worm burden, poor weight gain,
- ⇒ Eye, foot, staggers problems, scours or animals simply unable to digest dry fibrous food.
- ⇒ It is far more economical to give a background dose before these problems occur.

NOTE Have an independent soil test done as it is the best indication of what minerals stock require and will determine what is lacking or is readily available.



Free Choice Lick For Geese to Camels

Written by **Pat Coleby**

This is AN ALTERNATIVE and possibly easier and more efficient way of offering the necessary minerals for those who want another option to the mixed lick, which is explained in the most of my books.

This can be done in two banks of three or one long line of six containers. I think it should be made weatherproof as wet minerals are not very appealing, leading to wastage. Anyone with basic welding skills can make these frames from unwanted odds and ends.

Find six food grade 20L drums. Cut the tops off (a chain saw is the easiest). Then make a frame for them so they can be pulled round the paddock (on sleds, which seem to work better than wheels), if they are to be left in the paddock a roof would definitely be desirable at the height that would prevent the stock from getting IN to the container!! Use the same ingredients as suggested for the mixed stock lick, plus two additions, and put ONLY ONE mineral or whatever in each container.

Straight Lime
Dolomite
Yellow Dusting Sulphur (99%)
Copper Sulphate
Seaweed (kelp) meal
Coarse agricultural salt - unadulterated



Feeder Adaptation

Photo Courtesy Pat Coleby

Other trace minerals (like boron) are best added to the feed if necessary (for cobalt consult the relevant book or me) – it is rare for them to be needed. Read about the mineral in the books – especially “*Natural Farming*”.

Many stock keepers find it difficult to believe that animals of all kinds (from geese to camels to ordinary farm stock) have a very good idea of what they need, and we have seen many differing animals taking straight copper sulphate when they need it!! Human beings seem to be the losers in that respect!

For example – on a farm where the magnesium is high, stock will not take dolomite and therefore the dolomite in the **free choice** feeder would not be touched even if they need the straight calcium (as in lime). This method is not so labour intensive as the containers can be topped up from the back of the truck or whatever, and the lick station does not have to be brought back to the barn to be filled each time – nor is it so heavy, speaking from the feminine angle!! **Pat Coleby Consultant** **With Permission 2007**

HINTS ON USING THE PAT COLEBY LICKS

MORE FREE CHOICE FEEDERS

“Mortlock buffet”



Greg and Malcolm Mortlock follow the Pat Coleby principals of mineralising the soil and their animals. Upon Pat's advice the stock lick

SEPERATELY, consequently Greg has devised this 'buffet' version to supply all the elements provided in the Vitec Pat Coleby Lick Pack as required

separately to his merino sheep.

Greg finds he needs to lock the plastic drums to the steel drum as lambs are the worst for nudging out the containers. The timber can be just jammed in between the plastic drum and steel drum if you don't wish to screw drums to timber. See number 5 on instruction sheet. The steel drum does not have to be an old honey drum, use any suitable steel drum or a plastic 200Lt drum that has not contained flammable substances, chemicals or fish fertiliser.

- If your animals are heavy users of any of the stock lick components, just substitute a deeper container. The seaweed meal may have 20 – 30% of dolomite mixed with it to slow consumption.
- Keep all the stock lick elements DRY. Vitec seaweed

REMEMBER SAFETY FIRST

Do not re-use old fish fertiliser, chemical or flammable liquid drums.

Wear eye, ear, face and hand protection as required.

Secure the cut section of the drum **BEFORE** the final cut as it will spring open

NOTE Have an independent soil test done as it is the best indication of what minerals stock require and will determine what is lacking or is readily available.

Free choice feeders are easily disassembled and transported in a trailer to other paddocks when stock are moved, so they have constant access to the mineral licks and seaweed. **Supplements are offered in 20lt**



Close up of 3 sections of a free choice feeder.

- **Vitec King Kelp Seaweed Meal** is offered in generous amounts as part of the free choice supplements. Half fill the seaweed meal container.
 - The dolomite container has 2 - 4 kg
 - Sulphur and copper containers -only place 200- 400gms at a time.
- ⇒ I has been noticed sheep prefer to lick the copper sulphate and yellow dusting sulphur if these products are not covering the entire bottom of the container.
- ⇒ Stock will eat far less Vitec King Kelp Seaweed Meal than when it is initially introduced when their needs are satisfied and they have a more balanced system.
- ⇒ Mineralising stock will improve their condition.
- ⇒ Chemical drenching has been found to be reduced to once a year to nil and stock are able to cope better adverse conditions after offering mineral supplements.
- ⇒ Sheep have been noticed by many customers to have clean rear ends reducing the risk of fly strike.



Used cleaned and dried 20L plastic containers with the front cut out and secured to old pallets are perfect for this SA farmer.

Since these photos were taken he has modified them with a roof and wheels.



HOW DO I MAKE A FREE CHOICE MINERAL LICK STATION?

- * As containers need to be solid, an inexpensive method is to use a 200 Litre (44 gallon) drum.) They can be cut length ways and a section folded up to form a cover which is suitable for sheep.
- * For cattle take a 200 litre drum and stand it upright. Cut a big hole in the side 300 ml from the base leaving a base to put the lick into and the top to be a roof for weather protection. These can be secured to a fence line or on a post near water troughs.
- * A 200 litre drum cut in half lengthwise mounted on four posts with a sheet of roofing iron over the top.
- * Multiples of 20 litre plastic containers with one third cut off length wise placed under some shelter
- * Some farmers have moveable created shelters that are on wheels or on a skid.

NOW CHECK OUT THE NEXT FEW PAGES FOR EXAMPLES OF WHAT OUR CUSTOMERS HAVE DONE!!

WHILTSHIRE SHEEP ON A ROLL



Here are a few photos of the sheep feeder I made for the stock licks. You may be able to tell that it is made with a hand trolley as a base. This allows me to wheel it to whatever place it may be

required. The only cost to me was the cost of trolley, as the rest of the material was lying around the shed. It took a couple of days to make, and I needed to put my welding skills into practice, of course.

**Ron Boland
Gundowring. Victoria**



Horse, Cattle and Sheep communal Feeders

I use the Pat Coleby licks and Vitec Seaweed meal and the horses love it. Their coats are so soft, their colours are more intense and they look so much better.



The cattle and chooks also love the seaweed meal. I had the DIY feeder built following your instructions and all the animals have adapted to eating their lick and seaweed. Now there is no more wasted minerals or seaweed from wind or rain.

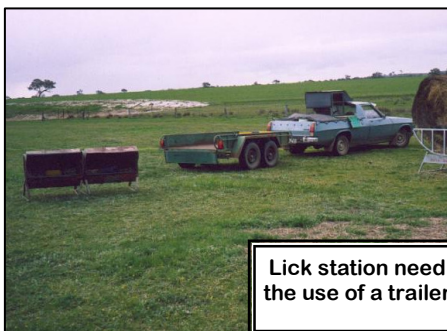
**Debbie Minkie , Metcalfe
VIC**



Feeders made by a welder for Debbie Minkie following these instructions.

VITEC KING KELP SEAWEED MEAL SUGGESTED REQUIREMENTS

***Offered free choice is preferable until stock are satisfied.
Monitor for stock that are over indulgent!***



Lick station need topping up? This job is made simple with the use of a trailer.

These Free choice feeders are easily disassembled and transported in a trailer to other paddocks when stock are moved, so they have constant access to the mineral licks and seaweed.



PERFECT HORSE FEEDERS ADAPTABLE FOR STABLE OR Paddock AND SIMPLE CATTLE FEEDER



Attached are photos of both feeders. The horse feeder is made out of guttering with wooden dividers that have been screwed in place and then silicone added to seal each compartment. The arms for attachment in the stable are made from L shaped metal from the hardware store and we used water pipe clasps flattened out slightly (then screwed into board on side of stable) to slip the arms of feeders into. The arms are also able to be adjusted (easily bent) to fit on the gates of the paddocks.



The feeder for the cattle was made out of wood and the pictures should be self explanatory.

Have a great Christmas and will speak to you again in the New Year.
Regards, Helen Parken

GOAT ADAPTIONS

At long last I send some info relating to scrap to make feeders to put out Pat Coleby's lick formula of minerals, pellets, grains etc. If you have some scrap spouting, C-section pipe etc lying about you can make some cheap feeders.

The spouting is subdivided by cutting timber blocs shaped into the spouting and held by screws. By using scrap timber a frame is made up and the two trays screwed back to back with a piece of 50 x 25 fitted over the top to deter the young goats from standing in the trays. The same principle is applied with the metal C section feeders for grain or pellets by welding something similar or if feeders are left open a length of pipe wired to three star droppers or 2 droppers if only one feeder. I usually tie the feeders to something like a post of dropper to stabilize them as the goats and sheep



sometimes will tip them over.

Driving a short star post into the ground at both ends and fixing to them by a wire stabilizes the mineral trays. They are positioned unto a half tank in our case or a shelter of some sort to keep them from getting wet.

Hope this can help stimulate some thinking in order that somebody may be able to make use of his or her scrap etc.

P.S The fruit trees and veg. garden are benefiting greatly by the use of Seaweed and fish Sprays.

Sincerely Ken Martin Congupna VIC

SHEEP FEEDERS



A permanent basic structure in a paddock



*Calf Feeder
Adaptation By
Gary Cooper Vitec Agent*

Simon recycled Kenworth truck mud guards, secured to a metal frame, for an eye catching Pat Coleby Mineral Stock Lick Feeder.



Front View Mud Guard

Hello Sonja and Russell

Thank you for information on drench friendly to dung beetles. Diatomaceous Earth seems to be working well already. Here are some photos of truck mudguard alternative feeder. 20L drums secured through handle and the hollow at the bottom of them (can't get them out though!!)

Welded up a bit of a frame screwed mudguards together and to the frame. (Should have put containers further into guards)

(MK 1 model will improve it next time) Have not found need to peg to ground. We cut and shaped some tin to fill in sides. Cheers Simon and Donna Hewitt- Nyora



Rear View



Basic frame work made from scrap. On skids to tow behind an ag bike.



Roof secured



Sides and rear covered in. Six mineral lick containers secured to box frame.



Rail above lambs heads and wire to prevent them hopping in.



Lambs chase the ag bike when feeder is moved.



Completed Mineral Lick Station

CATTLE TRAILER



Hi Sonja,
I got rid of the floor (which was basically non existent) and put a new one in, put a roof on and a thick coat of primer to try and keep the rust at bay. Rather than use cut up 20L drums I bought some containers to screw down onto the floor, and the reason for this, is so I can put lids on to the containers rather than empty them to minimise spillage when I move it from paddock to paddock with the stock. Round on the left hand side you can see I fashioned up a jack of sorts, using an old plough disc and some RHS. Which you place behind the axel and reverse back a couple of feet and this lifts the wheel enough to be removed. Also, I've banged a star post into the ground at the front of the A frame draw bar and wired it to the trailer, just in case the bulls and the larger beasts get a bit rowdy around mineral feeding time. In it I've put the usual 6 recommended minerals... As well as this I've put in some Azomite (it's a clay, full of minerals & trace elements). So far after just a couple of days monitoring the cattle seem mostly interested in the Rock salt and just a little bit of Copper. I hope this indicates the our soils a reasonably well balanced. I hope it will work well. Have a look at the pics.

Regards for now, Pete Loader



Email received 23.5.08

Enhancing Supplements *Naturally and Legally*

What is Vitec Trio?

Vitec Trio is the perfect combination of the best that Mother Nature has to offer. **These products are extremely beneficial for all animals needing extra nutrients for health or during adverse or stressful conditions.** Vitec Trio is comprised of 3 drums, 1 each of:-

1. **Vitec Min-Kel** is a liquefied Tasmanian king kelp boosted with extra minerals –magnesium, copper, zinc, selenium as well as Vitamins A, D, and E.
2. **Vitec Organic Cider Vinegar/Garlic** is unpasturised, naturally fermented and unfiltered retaining over 90 essential minerals, vitamins, trace elements and amino acids.
3. **Vitec Omega Cod Liver Oil** provides the vital Omega 3 fatty acids and vitamins A & D essential for optimum absorption of nutrients in the digestive system.

"...hoggets scouring for 2 months, gave them Min-kel and scouring immediately cleared."

Mark Blaland, Tamworth, NSW

1 DRENCHING:- Drenching is the most effective way of administering because it ensures 100% utilization. However practical considerations will restrict drenching to sick animals and to some strategic applications.



2 ADDING TO GRAIN & FEED VITEC TRIO, can be sprinkled or sprayed over hay or other dry feed. Some extra molasses may need to be added initially to increase acceptance then gradually withdraw.

*"Drenching monthly with **Vitec Trio**...the results are fantastic... pregnancy toxemia cut to less than 1%, worm drenching reduced to once a year...lambs have much more condition ...resulting in reduced feed costs."*

Malcolm Shepherd Clark, Edgcombe, Vic.

3 ADDING TO WATER SUPPLY

Vitec Min-Kel and Vitec Organic Cider Vinegar can be added to water troughs. Dilute with water first then add to the trough, usually on a weekly basis. This can be highly effective . . . but trough dosing should be carried out early in the day to ensure your stock get an even uptake.



Trio can also be made available, with or without molasses in a molasses drum feeder (wheel or ball feeder).



Pure Bliss

Times have been extremely hard with drought conditions for the last twelve months and so I have been feeding all the "mules" as we call them (short for "animals") a daily mash made up of a little oaten chaff, bran and pollard in which we include the **Pat Coleby** mix of **dolomite, sulphur, seaweed meal and copper.**

Vitec Trio - Weekly



Vitec Snacks

We also administer to the sheep weekly an oral drench of the **Min-kel; cod liver oil and apple cider vinegar.** To ensure that all get their share I tether the sheep and give them their bowls of mash. The lambs have followed their mothers' leads and have enjoyed the benefits on offer. So much so that I found one of the lambs curled up in a feed bowl - looking a picture of pure bliss. I must add that I have had such good results maintaining the health of all our animals during such difficult drought conditions that I believe it is directly as a result of the feeding indicated above. The family dog and pigs also get the Min-kel mixture. We have been so impressed that we have been able to offer the information to other locals. Even the produce store has been impressed with the reasons for purchasing many of the items above.



Thanks again for your assistance and I always look forward to the newsletter. Its always enjoyed Lorraine Gould Childers QLD

(alias - dung beetle - and aren't they wonderful little soil gems).

BENEFITS OF USING VITEC TRIO DURING TOUGH TIMES

- ⇒ lower worm burden
- ⇒ Increased weight gain by stock
- ⇒ elimination of eye problem
- ⇒ less scouring
- ⇒ less fly strike
- ⇒ horse coats colour intensified
- ⇒ Stronger, split free hooves
- ⇒ better than expected wool cut
- ⇒ stronger higher tensile wool
- ⇒ Improved skin and coat
- ⇒ Overall boost in the general health and condition
- ⇒ better utilisation of dry feed
- ⇒ much better condition of stock
- ⇒ Better cycling
- ⇒ Improved fertility
- ⇒ Greater conception rates
- ⇒ Birthing percentages better than expected
- ⇒ good survival rates of young
- ⇒ Improved progeny
- ⇒ Improved resistance to worms

EASY DRENCHING WITH VITEC TRIO ALL STOCK INCLUDING CATTLE GOATS ALPACAS



LAMBS-Look even Sonja can do it!!



PONIES AND HORSES



SHEEP

Vitec Trio Preparation



Measuring Vitec Trio into measuring jug



Mix measured MinKel , Cod Liver Oil and Cider vinegar together



Pour prepared Vitec Trio mix into drench knap sack then dose animals

“They can’t do any better!It’s very economical”

*I started my Wiltshire stud in 1994 and started using **Vitec Min-Kel** as a drench 3 years ago. I used it as a tonic prior to joining and prior to lambing and gave the sheep 20 mls of Vitec Min-Kel each.*

My sheep have blossomed and they even got too fat and have never looked back.

*I have a **200% lambing rate** with twins and triplets and I also spray **Vitec Min-Kel** on the hay in drought conditions. For the last 2 years I have also **mixed it with Vitec Organic Cider Vinegar** and really they can’t do any better - there is nothing to improve on and furthermore it is **very economical** as I don’t feed grain.*

*At any given opportunity I give my sheep **Vitec Min-Kel** and can highly recommend it. “*

Ros Henning, “Strathvalley Wiltshire Stud”, Yackandandah, Vic



WHAT CAN VITEC AUSTRALIA SUPPLY YOU WITH?

ALL PAT COLEBY MINERALS 1KG >
VITEC MIN-KEL
VITEC ORGANIC APPLE CIDER VINEGAR
VITEC COD LIVER OIL
VITAMIN C (SODIUM ASCORBATE)
DIATEMACEOUS EARTH (FOR WORM CONTROL)

NOTE: If its not listed please ask and if we can not supply it we will source it for you. We also have a large range of Organic fertilisers, soil conditioners, nozzles, drum pumps, Brix Meters, Soil Test Kits, Spray unit Hire and much much more.

PAT COLEBY STOCK LICK STARTER "6" PACK

- * This popular Pat Coleby stock lick is supplied in 20 Kg packs.
- * Unique to Vitec
- * All components are *separated* ready for *free choice*
- * All minerals are **STOCK GRADE**

SEAWEED (KELP) MEAL
COARSE NATURAL MURRAY DARLING
SALT
DOLOMITE
STRAIGHT LIME
COPPER SULPHATE
YELLOW DUSTING SULPHUR



DUE TO SAFETY REGULATIONS WE ARE UNABLE TO SEND SULPHUR THROUGH THE POST. YOU ARE MOST WELCOME TO PICK UP OR LARGER QUANTITIES CAN SENT VIA A FREIGHT COMPANY. ANY QUESTIONS PLEASE GIVE US A CALL.

HELP NEEDED

If you do construct a free choice feeder or have any adaptations PLEASE send me a 'photo and some details via snail mail or email me at Sonja@vitec.com.au Going by the numerous request for these instruction many of you are also following the Pat Coleby principals.

I hope this information is of assistance in your construction.

Happy 'buffet' building. Heather Berner 1800 622 345

IF YOU WOULD LIKE MORE INFORMATION ABOUT VITEC TRIO or ANY OTHER PRODUCT PLEASE CALL US ON

FREECALL 1800 622 345 (Mobiles excluded)

PHONE 03 5977 7600

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