

## **Animal Health Work sheet One.**

This is true story from Vet, John Stirling.

***TASK: Read the story and find the following information.  
Copy the questions into your book.***

### **Animal One. The pregnant cow. (page 1)**

Qu 1. What are the cow's symptoms ?

Qu 2. What do you think caused these symptoms ?

Qu 3. Name the problem and what could be the cure.

### **Animal Two. The Dead lambs (pages 2 - 3)**

Qu 4. Where did the farmer get the lambs from ?

Qu 5. How did the farm know that their was a problem ?

Qu 6. When the Vet arrived, what symptoms did he see on the living and dead lambs ?

Qu 7. What was the cause and how was it killing the animal (two reasons)

Qu 8. What cure did he recommend ?

Qu 9 How could the farmer, prevented this problem ?

### **C Ovis. (pages 3 - 4)**

Qu 10. Draw a diagram showing the life cycle of C Ovis.

Qu 11. Describe two ways to prevent C Ovis from infecting other animals.

## ***5. A Good Buy – Or was it?***

I had been called to the local saleyards to attend a casualty. The patient was a heavily pregnant Jersey-cross cow, no doubt sent for sale because she was calving out of season and a likely purchase for someone seeking winter milk. Unfortunately, as in this case, heavily in-calf cows subject to the additional stress of trucking and travel are liable to hormonal distortions which can cause adverse variations in blood chemistry, particularly in relation to calcium and magnesium.

The case in point, which luckily had been seen early, was flat on her side and fairly distressed when I saw her but quickly responded to an intravenous calcium injection. She was soon back on her feet ready to return from where she came. The agent did not feel it prudent to offer for sale an animal so recently close to death and with, as I told him, some prospect of relapse. On my way back across the maze of catwalks provided for buyers, sellers and spectators above the cattle pens, I passed close to the pens where the auctioning of sheep was proceeding apace. Perched on a nearby rail I detected Joe Crookstock, apparently engrossed in the proceedings.

'Are you into sheep now as well as the cows?' I queried.

‘No, nothing like that,’ Joe responded. ‘The cows will do me, even if it does take most of the milk cheque to pay the vet. I heard the prices for sheep were pretty slack so I talked it over with Fred here and we decided we’d try to pick up a few lambs for the deep freezers to keep us in meat over the winter, especially as that Hereford vealer we were banking on died of Blackleg a while back.’

Fred favoured me with a faint grin of recognition but, as was his custom, didn’t say much.

‘Well,’ I remarked as I took my departure, ‘lambs shifted on to cow pasture usually thrive, so I hope you get what you want and they do well for you.’

My hopes were apparently not to be fulfilled. A week later, while I was finishing breakfast and trying to solve a homework problem on behalf of my middle-sized daughter, the phone rang.

‘What do you know about sheep?’ asked a familiar voice. I replied that the five-year veterinary degree course had substantial ovine input.

‘Well,’ my client continued, ‘Fred and I managed to get hold of 20-odd lambs at that auction you saw us at the other day.’

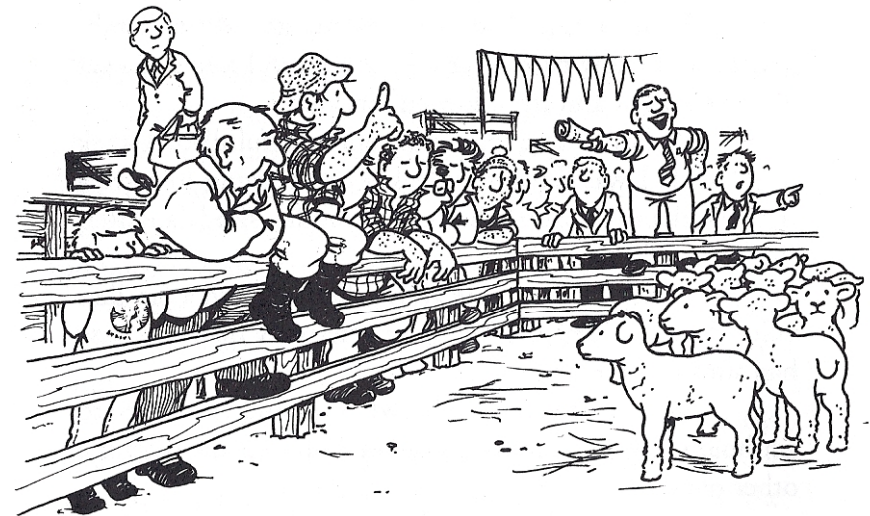
‘Although they weren’t very flash they were dead cheap and since we got them home here they’ve been running round the house paddock looking not so bad. That is, until yesterday, when one turned its toes up and this morning another couple look as if they’re on their last legs.’

‘You’d better have a look at them. I don’t want the cows to catch any sheep bugs. They’ve got enough of their own’

When I arrived at Neverite Farm, Joe had rounded up his lambs and jammed them behind a gate in a corner of the cowshed while dog Twit kept a watchful eye on the proceedings.

‘Another one’s snuffed it since I rang you,’ said Joe. ‘It’s on the tray of the tractor by the gate there.’

The assembled shorn lambs certainly didn’t look anything special although there was little soiling of their back ends indicative of the diarrhoea which is a very common affliction of young ovines. Joe lifted one over the gate while I checked its teeth to determine its age, I noticed that



*Joe Crookstock was perched on a rail where the auction of sheep was proceeding apace.*

the usually pink lining of the gums was the colour of ivory. The sunken eye, indicating loss of its fat support, also showed eye membranes which were extremely pale.

‘I think that it would be a good idea if we had a look inside the one on the tractor,’ I said, returning to the truck for my post-mortem gear. The lamb was still warm and its eye membranes were also anaemic. I knew what I was



looking for, and soon slit open the abomasum, the fourth or true stomach. I noticed some fresh blood mixed in the sparse stomach contents. On the corrugations of the membrane lining the stomach I was able to pick up with the point of my knife small clumps of thin, intertwined worms, each about two or three centimetres long and looking very much like a miniature stick of candy or a barber's pole, with a red spiral encompassing the greyish cylinder which formed the worm's body. I explained to my client that the red spiral was in fact the blood-engorged intestine of the parasite and this was the cause of the problem. The worms were literally sucking the blood out of the lambs.

'The name of the villain of the piece,' I added, 'is *Haemonchus contortus* or, if you like, barber's pole worm, because of the way it looks.'

Joe said he preferred the latter name and wondered if it would get into the cows.

'I doubt it,' I replied. 'I think that these worms were well established before you bought your lambs and maybe the stress of trucking and yarding let them get away a bit more than they otherwise would.'

I told my client that he would need to treat his lambs right away and after rummaging round in the milk room for a while, Joe came up with a container of calf drench which, the label indicated, was also suitable for sheep.

'Give them a dose now,' I advised, 'and another in a week. After that once a month should do fine.'

'I'll give Fred a ring,' said Joe. 'After all, he paid for half of them so he can give me a hand. I think he's got a sheep drench gun as well.'

Joe helped me collect my gear and as I moved back to the truck he quipped, 'Well, I've never had much to do with barbers or their poles up to now. The wife's been cutting what's left of my hair for 20 years.'

Joe Crookstock never had much enthusiasm for the calving of cows and as a result my visits to Neverite Farm on this score were above average. Joe reckoned he'd rather pay the veterinarian and get half of it back from the tax man than, as he put it, 'slave his guts out trying to do something he knew nothing about and without the right gear'.

'Every man to his job,' philosophised my client as I washed up after delivering a perfect Friesian bull calf.

'By the way, remember you saw me and Fred at the sale a while back?' Joe said.

'You bought some lambs for the house,' I recalled.

Said Joe, 'And after they got over that bit of worm worry they went ahead like a house on fire on the good cow tucker; just like you said they would.'

'The other day I rang up Fred who paid for half the lambs and said that three or four looked good enough to be killed and it didn't make much sense paying the butcher for meat when there was plenty running around in the front paddock.'

'Fred fell in with the idea and, as I was passing the freezing works, I put three in the trailer and dropped them off ... owner's account local, as they call it. But when I got the killing sheet yesterday, blow me, if one hadn't been condemned by the inspectors for what they call *C. ovis*.'

'I suppose the "C" doesn't stand for Charlie but that's how I felt.'

'That's not all. The hydatids joker from the county has been ringing up and says he thinks we might have a bit of infection out here; he wants to come out and give old Twit, the cattle dog, a dose and see if he has any worms in him. All this sounds a bit daft to me, but what's the story?'

'*Cysticercus ovis* is the sheep stage of a big tape worm found in dogs,' I explained. 'This tapeworm drops eggs neatly packed in segments off its back end and they pass

out of the dog on to the grass where they can dry up and blow around spreading quite a distance.

'Now, if a sheep picks up the eggs off the grass they hatch out into a larva and this burrows around until it finds a place it likes to set up house, usually in the meat. It then forms a small cyst about the size of a pea filled with fluid and awaits development. Now, if fresh sheep meat with sheep measles in it, for that's what the cyst infection is called, is fed to a dog the head of the new worm attaches itself to the dog's intestine and, in time, grows into another healthy tapeworm.

'I rather think that the lambs you bought must have been infected before they came here,' I continued. 'You once told me that Twit only gets milk and dog crackers so it's not likely that he would be the culprit, but the hydatids man will soon find out when he doses him. That will upset the calculations of any tapeworms he might have inside.'

Asked Joe: 'That means some of the other lambs could go down the chute as well then?'

'I'm afraid that is quite a possibility seeing that you've had one out of three condemned so far,' I replied.

'I think that when Fred hears about this he'll be all for a bit of home killing,' said Joe. 'He's pretty handy with a knife you know.'

'There's nothing in the law to stop you home-killing for your own use,' I said. 'But remember, if you do that you will be eating meat which has not had the benefit of qualified inspection and could therefore be a health hazard for a number of different reasons.'

'You mean a man could get a dose of these cyst things or worms if he got stuck into a bit of lamb that had them in it?' asked Joe.

'No chance of that,' I replied, 'but if you fed the infected mutton to a dog without first boiling it up thor-

oughly the dog could get the worm and then pass on the infection to other sheep. Another way to make the meat safe is to freeze it completely for at least ten days.'

My client thanked me. 'I'll have to have a word with Fred and see what we can work out.'

John Stirling worked as a country veterinarian in Northland for more than 30 years before retiring. However, his regular column looking at farming's everyday animal health events, through the lives of Joe and Jenny Crookstock of Neverite Farm, still appears regularly in Whangarei's *Northern Advocate*. *Earth Born Companions* continues on from where John's first collection of stories about life on Neverite Farm, *On Four Legs and Two*, left off. Although the main purpose of the book is to entertain there is also an educational undercurrent which may be useful to those who derive their sustenance and pleasure from the land and the countryside.