This is Tony Palmer, recorded at his home in Cambridge by Felicity Aston on the 23<sup>rd</sup> November 2010

Palmer, Tony. BAS Archive ref: AD6\_24\_1\_108\_1, Transcribed by Barry Heywood on 25.03.2018

Antony Claude Palmer, born 8<sup>th</sup> February 1926 in Bedford.

[00:00:18] Aston: How did you become a vet in the first place?

Palmer: I decided to be a vet when I was 15 and went to the Royal Veterinary College and qualified as a vet in 1948. Thereafter I spent a year as House Surgeon learning all about the current technical aspects of veterinary medicine and thereafter again I was very fortunate to get awarded a veterinary education trust scholarship to go to Cambridge to read the Natural Science Typos. Having qualified from the Royal Veterinary College with a diploma, I had no degree. I wanted a degree to further research. In the Trypos I read Human Anatomy and Part Two Physiology. The Human Anatomy involved a course of neuro-anatomy, which was first class training for my subsequent career.

[00:01:25] Aston: Why did you decide to become a Vet? Was it a family thing, or personal interest or...?

Palmer: Well I had a little Jack Russell Terrier when I was 12, which was very sick and died. I suppose that started my interest, which did not waiver.

[00:01:49] Aston: What kind of animal size being were you actually basically involved with until this point of ....[Interviewer inaudible – Transcriber]

Palmer: Only dogs, actually. Chickens... during the war we kept chickens for the eggs.

[00:02:07] Aston: How did you get in contact with the British Antarctic Survey?

Palmer: Well this is quite a convoluted story. It all depended on serendipity, I think, because after getting my degree I then was asked to study scrapie, which is a BSElike condition [Scrapie is a fatal, degenerative disease that affects the nervous systems of sheep and goats. It is one of several transmissible spongiform encephalopathies (TSEs) which are related to bovine spongiform encephalopathy (BSE or "mad cow disease") – Transcriber]. The Agriculture Research Council wanted a veterinary surgeon to be trained in things neurological. They offered me two months experience in the National Hospital for Nervous Diseases in London [National Hospital for Neurology and Neurosurgery, Queen Square- Transcriber]. I went there for two months and stayed for two years, studying sheep with scrapie. And I had sheep with scrapie on the roof of the hospital. Interesting - an example of comparative anatomy as well as comparative medicine! When I returned to Cambridge, I carried on with my PhD, and then ran out of money. My professor, Professor Leslie Pugh, had contacts with the Leverhulme Trust, and applied for financial support. The Trust sent down Sir Raymond Priestley, who happened to interview me. Sir Raymond was a delightful person, and during the interview we got on to the question of the Antarctic, Scott's Expedition, why it failed... and then he said "Well we have some problems

with Huskies down there suffering from paralysis". I thought to myself 'I am interested in things neurological and dogs'. "I suppose that you have got a vet down there?" He said "No, we do not have a vet. We have physiologists and medical people but we have never had a vet". So I said to him "Isn't it about time that you had a vet there down in the Antarctic!" That started the whole ball rolling.

[00:04:36] Aston: So what did you say was the problems with the dogs that they were having?

Palmer: They were having a form of paralysis. He thought that it was a form of paralysis that dogs going off their hind legs, especially the old Huskies. There was another problem, which came up later.

[00:04:56] Aston: Interestingly, he said that he felt the problems with the dogs was one of the reasons that Scott had failed. What did he say about that?

Palmer: No, he didn't say that. He said he thought that Scott failed because of scurvy.

[00:05:11] Aston: Right. So what was Sir Raymond Priestley like?

Palmer: Sir Raymond Priestley was a delightful person. It is a long time ago but conversation was... I was a young person trying to get some money and he was a delightful person to talk to. Then, I think he said "Well, perhaps you would think about writing a veterinary manual for the treatment of Huskies and also sending out drugs and other apparatus for their care? I said I would. All this happened some time ago, at least [Pause - let me find a piece of paper...] This interview was in May 1957 and yes, the first request came through on the 15<sup>th</sup> of July wanting a list of drugs and anaesthetics for veterinary purposes to be sent down to the Antarctic, and also a manual on First Aid instructions. By September, the manual together with supplies went down on the next expedition. However, I understand that they never reached their destination. I understand the ship encountered heavy seas. A lot of top hamper, which had to be relieved by ditching the deck cargo. This was the information given to me by Andrew Bellars in 1968. So that was rather unfortunate but I think that I still have a copy of the Manual and a list of the kit that we sent down.

[00:07:13] Aston: So what did the manual cover?

Palmer: Technique of injections, anaesthetics, the treatment of skin wounds, abscesses, fractures, castration, abdominal surgery, neochasms, eyes, foetal impaction, skin ectoparasites, internal parasites, nephritis, feet, infections such as distemper, pneumonia, enteritis... and post-mortem techniques.

[00:07:54] Aston: So was this an easy manual for you to put together?

Palmer: Well it took time! There were 20 to 30 pages...beautifully written stuff here.

[00:08:04] Aston: How did you feel about being asked to do it? Did you instantly know what sort of information they needed or did you feel that, perhaps, it was a difficult thing for someone with no previous veterinary knowledge to do?

Palmer: Well I was young and I was big-headed. I had just qualified and clearly I was just the person that they wanted. No, it was fairly easy. It took time, that is all.

[00:08:34] Aston: Were you contracted by the British Antarctic Survey to do this? What sort of arrangement did you have...

Palmer: I was not contracted. The first contract that I have had from the British Antarctic Survey arrived today! This is all about the history recording that I have written, which I still have not read. No this is all out of interest. The subsequent work done on various pathological specimens, which might be 60 or 70, came to my laboratory and the University never charged a penny! I did it for interest. [00:09:15] Aston: What particularly was your interest? In terms of did it fit with your PhD or was it just because you had worked quite a lot with dogs?

Palmer: No it was potentially there was a nervous disease affecting the Huskies and therefore I was interested to see what it was all about. Then, soon after I had a letter from Sir Vivian Fuchs, himself, talking about Signy [Signy Island Base, 60°42′29″S 45°35′42″W. Transcriber]

'X-disease'. Now this was an interesting condition, which many people do not know anything about. I had a letter from him, which I still have, on the 8<sup>th</sup> of June 1960, describing a disease of Huskies, which animals showed inappetence, pyrexia, inflammation of the sub-mandibular lymph gland, abscessation, and inflammation of the genitalia. Within three days the dog had either recovered or were dead. In all the cases the dogs had been fed Elephant seal [Mirounga leonine, Transcriber], and clearly to my eyes...they had abscesses... it seemed to be a bacterial infection. I believe the Elephant seal were also known to be affected by erysipelas. I suggested that that was the cause and that it could be treated with a course of antibiotics successfully. I didn't hear anything else about it! That was known as Signy X disease.

[00:11:04] Aston: That was a letter sent to you by Fuchs?

Palmer: Yes. I have several letter sent by Sir Raymond and Fuchs as well.

[00:11:17] Aston: Did you meet Fuchs?

Palmer: Well he lived in Cambridge about a ¼ mile away from me so...I didn't actually...I supposed we recognised each other, I think. I didn't have much in the way of conversation with him.

[00:11:35] Aston: Going back to the Huskies that were in Antarctica, as a vet, when you were told about these Huskies what were the specific problems with that kind of limited group of dogs down there? Were they generally healthy or did they have a lot of problems? What can you remember about the Huskies there?

Palmer: Well, having sent three veterinary surgeons down to the Antarctic, they of course sent back specimens. These specimens came either in Formalin or sometimes I had the impression that they had been fixed in alcohol, which was probably whiskey. These had been reported by Bellars and Godsal. Bostlemann went down as well. My

particular interest was in the animal's so called leg paralysis and so when Andrew Bellars went down we found an X Ray machine in the Veterinary School, which he took down with him so he could X ray all these animals, their limbs and especially their backbones. Not only did he take that very heavy X-Ray machine down but also, thanks to his efforts, he brought it back again. It came back to the Veterinary School.

[00:13:30] Aston: Let me get clear in my mind the chronology of all of these things. You were sending the manual and materials...what kind of feed-back did you get from BAS, when they eventually did get there, about whether they were successful, whether they were using the manual for the dogs?

Palmer: No, as I have said, they never arrived. All that effort and it didn't arrive!

[00:14:01] Aston: OK. So then, what was the next step?

Palmer: I did in fact get in touch with Sir Raymond and eventually they decided 'Oh ves, they would take it up. This is in October 1957, I had a letter from Sir Raymond and he said "Although this would be an entirely a new departure, as a result of deliberations of the Scientific Advisory Committee of FIDS, we were able to appoint Mike Godsal to go down in the 1963-64 season." And later, Andrew Bellars and Robert Bostlemann were sent down for the season, 1967-68 and 1973-74. So we had veterinary representation down in the Antarctic, and I believe the vets were highly thought of. I had excellent reports about what happened down there. Meantime, of course, they sent their reports back to me and sent the various specimens, post mortem specimens. But the most interesting thing, I think, was when Andrew Bellars went down with the X-Ray machine, he realized that the affected animals that were going off their legs were not actually paralyzed, they were suffering from a major form of arthritis, especially of the hips. Andrew wrote this all up later on and published it. It would appear that both the fore and hind legs were affected. This form of arthritis is probably mechanically induced. The fact that these animals were pulling heavy weights, and also the fact that, I suspect, if their limbs sank into the snow they had to abduct their limbs to get the limbs out again. This exacerbated the potential for the mechanically induced arthritis.

[00:16:28] Aston: Ultimately the workload of sledge pulling I suspect might have...

Palmer: I would suspect so, yes!

[00:16:38] Aston: So the Vets that went South, do you have any involvement in their appointment, or were you just someone that they sent their specimens to?

Palmer: All of them were my graduates from the Cambridge Veterinary School, that was one thing. I really can't recall how they were appointed. I suspect that I must have been involved. I must have been. Certainly I knew Andrew Bellars very well because before he qualified he was one of our baby-sitters.

[00:17:20] Aston: [Laughter]. So what do you think made a good Antarctic Vet? With these graduates what made them successful in these projects? Was it their skills,

personal attributes, or what, when in employment?

Palmer: I suspect that they were socially very agreeable. I must not mention names but certainly about one person I had a glowing report of the influence that he had on the communities, the Antarctic communities. If he could deal with animals he could deal with men.

[00:18:05] Aston; What about their sort of academic work, was it that people sent South dealt mostly with dogs...

Palmer: They were all practitioners. They were all gradates from the Veterinary School but they were all practical Vets. I think that they were out of 'Practice'. Certainly they all went into Practice after the experience that they had had in the Antarctic. All of them had their reports and from memory I believe the Andrew Bellars work was actually published.

[00:18:52] Aston: What sort of information did they send back to you when down in Antarctica? You mentioned specimens but what on particular were you interested in them sending back to you?

Palmer: That is a difficult question because they sent the specimens back but then they actually examined and studied the specimens themselves when they returned.

[00:19:20] Aston: So at this point were you still interested in the neurology of the dogs in particular? Were you still using that for anything, your work in life, or was it just an interest?

Palmer: Well these animals were not suffering from a neurological disease. I was interested to encourage the Vets when they came back to write up their results. I supervised them when they were doing that.

[00:19:53] Aston: Was there anything else notable about the Huskies? Did it make a difference that they were such an isolated population? Were they different from communities of Huskies elsewhere?

Palmer: I cannot comment about that. I remember Andrew Bellars went to Iceland or somewhere, to get additional animals for the Antarctic. He went to Greenland, that's right and selected Huskies to be transported to the Antarctic for breeding purposes. But the sadness is the fact that having sent these chaps down there and they did the work and they got some information about their problems and diseases, they then went down and shot them all! Of cause when they did that they were not very popular among the local community. I think Andrew Bellars had a quite a tough time and so did Bostlemann when they had to put these animals down. Very sad! So really, it was a lot of effort for nil return.

[00:21:25] Aston: Were this action as a result of the Antarctic Treaty decision to remove all the animals or because the dogs were having...

Palmer: I don't think that it was anything to do with the problems that the dogs were having. No this was for other reasons entirely. They say that it was due to the fact that there was a change in the Boss. But I cannot make any comment. [Multiple deaths in the common seal populations of the North Sea, gave Greenpeace the

opportunity to lay the blame on dogs defecating on UK beaches and consequently to put pressure on the UK Foreign Office to force BAS to remove Huskies from the Antarctic. Afterwards it was proven that the UK seals had died from a phocine distemper virus and that there was no connection, even remotely, with dogs! – Transcriber]

[00:21:56] Aston: So it was just three Antarctic vets that went South?

Palmer: Yes.

[00:22:03] Aston: You did not send anymore?

Palmer: No. There was another one sent down, I think by Dick Laws, who took over BAS, and I suspect his name was Williams. But he had nothing to do I think with the Huskies. I can't comment. I was put out because I having been involved with the vets, I objected to this development [The removal of the Huskies from Antarctica – Transcriber]. That is life.

[00:22:38] Aston: So why is it then decided to stop sending Vets after the three that had been very successful?

Palmer: Well I suppose that if you have got no dogs you have got no Vets.

[00:22:49] Aston: OK.

Palmer: Some of them, the dogs, came back and went to Canada, I believe. I don't think that they survived for very long. It may have been because they were not use to disease such as distemper. I don't know. I do understand that they died fairly soon. One or two were bought to this country. Andrew [Bellars] bought one back.

[00:23:27] Aston: When you said they went down for a final time to shoot the dogs that was literally the last of the Antarctic sledging dogs?

Palmer: As far as I know. I mustn't say 'shoot' because I suppose they were put down with intra-venous barbiturates. That is the standard method of putting animals down. A lovely way to go – I hope that I go the same way.

The End

## Highlights

- 00:00:19 Childhood decision to become a veterinary surgeon
- 00:02:07 Research on Scrapie in sheep
- 00:05:11 Meeting Sir Raymond Priestley
- 00:05:15 Request for Veterinary Manual and medical supply list
- 00:07:13 Veterinary Manual content
- 00:08:34 Dealings with BAS
- 00:09:15 Signy X disease
- 00:12:02 The three veterinary surgeons employed by BAS
- 00:12:55 Obtaining an X-Ray machine
- 00:14:01 BAS decision to employ veterinary surgeons
- 00:15:37 Discovery dogs suffering from arthritis not paralysis
- 00:17:20 Attributes of a good Antarctic veterinary surgeon
- 00:19:20 Palmer's personal interest in Huskies
- 00:20:38 Obtaining Huskies from Greenland for breeding purposes
- 00:21:06 Decision to kill the BAS Huskies
- 00:22:39 Palmer's objection to killing the dogs
- 00:22:52 Fate of certain dogs not killed

## Addendum

Written by Antony Claude Palmer

A.C.Palmer – association with the FIDS/BAS

Financial support for writing my Ph.D. thesis (1958-60) had been obtained by Professor Pugh from the Leverhulme Trust and this contact resulted in another venture, involving the Antarctic. Before being awarded a Leverhulme Fellowship, I was interviewed in Cambridge by the Trust's representative, Sir Raymond Priestley, (May 1957).

Sir Raymond proved to be a delightful person and during the interview expressed his interest in the Falkland Islands Dependencies Survey. He related how he had been one of the support group in Scott's last expedition to the South Pole. It was generally accepted that the expedition had failed because of scurvy.

He also explained, at the time of my interview, that a number of huskies were suffering from a form of hind-leg paralysis. From this introduction there developed a body of work which was to occupy me for the next 8 years.

At first there was a request (15 July 57) for a list of drugs and anaesthetics for veterinary purposes, to be sent down to Antarctic bases and this was to be followed by a manual of first-aid instructions. I understood that at the time, veterinary work was usually carried out by the resident medical officer, physiologist or dog handler. I completed the manual by September '57, and this, together with the supplies were sent down by sea on the next expedition. However, I understand that they never reached their destination. The ship encountered heavy seas and the top hamper had to be relieved by ditching the deck cargo, in which the supplies were loaded - or perhaps they were simply washed overboard (see letter A.R.M. Bellars, 23 Jan 1968).

Apart from paraplegia, the huskies also suffered from another problem,' Signy X disease', described in a letter from Sir Vivian Fuchs, 8 June 60. Animals showed inappetance, pyrexia, inflammation of the submandibular lymph glands, abscessation and inflammation of the genitalia. Within 3 days the dogs had either recovered or were dead. In all cases, the animals had been fed elephant seal and I suggested that the condition could be a bacterial infection, possibly caused by Erysipelas rhusiopathiae, which is known to be widespread in the seal population. The disease occurred in animals on Signy Island, hence its name.

I suggested that a veterinary surgeon should be sent out to the bases to attend the animals. This idea was favourably entertained by Sir Raymond in his letter (16 Oct 57), although this "would be an entirely new departure". As a result of subsequent deliberations with the Scientific Advisory Committee of F.I.D.S., a Cambridge veterinary graduate, Mike Godsal, was included in the party for the 1963-64 season. His work proved so successful that two more Cambridge graduates, Andrew Bellars

and Robert Bostelman, were sent south for the seasons 1967-68 and 1973 and 1974.

Prior to his trip, Andrew Bellars spent a holiday with his wife in Greenland, selecting huskies to be transported to the Antarctic for breeding purposes. He also took to the Antarctic a portable Watson x- ray machine (from the Veterinary School, Cambridge) and was able to establish that the so-called paraplegia in the huskies was indeed a form of arthritis, affecting the hip joints of many of the older animals. This was probably exercise-induced, stemming from compression forces on the joints, induced by pulling heavy sledges. This was aggravated by the need to abduct the limbs, to withdraw them from snow, during protraction. These conclusions were supported by post- mortem evidence which Andrew subsequently wrote up in two publications. He also brought the X-ray machine back to Cambridge!

Bob Bostelman was the last Cambridge vet. to go to the Antarctic. Like Andrew Bellars, Bob had the unenviable task of putting down many of the huskies, as part of the programme to replace dogs with snowmobiles. He encountered much hostility from personnel who were naturally very attached to the animals.

Throughout the Antarctic experience, post-mortem specimens frequently arrived at my Department. They were fixed in a variety of preservatives, including whisky. Some 70 pathological specimens were processed histologically and examined. Apart from Bellars' publications, Godsal wrote a "General Veterinary Report on the Huskies in Grahamland' and Bostelman wrote a "Dog Report" with Neil Macallister.

This work was carried out at the School of Veterinary Medicine, University of Cambridge at no financial charge, a happy collaborative project between two institutions, a situation unlikely to prevail today.