

# Northern Territory Experiences in Top End Dog Programs<sup>2</sup>

*By Stephen Cutter and Jenny Wells*

## **Stephen Cutter**

It is quite obvious that there are a lot of people here with differing experiences and knowledge about dogs, communities and dog programs. The following information will be quite basic for some people but completely unknown to others.

Our particular dog program has come from talking to many, many people--Aboriginal people, government departments and others--and looking at the pros and cons from the communities' point of view, from past experience in the communities and from our own experiences. It's worth noting that communities differ markedly in size, language, perception of dogs and other factors. There are exceptions to every rule.

My first dog program was in 1975 at Areyonga in the centre, when I was three and was given a little mangy puppy! In 1997 I was invited to five East Arnhem communities, and subsequently to two more. The program continued to expand, and in 1998 Jenny joined and moved into other communities. Sam Phelan has also recently joined and added more communities. Almost all of these communities we continue to go to, although a couple have dropped off for various reasons, mostly financial.

## **Jenny Wells**

**Our aims.** When we go into communities we ask people what they think the problems are and what they want solved. We also explain what *we* think the problems are and talk about the methods we are going to use to solve them. The aim is to get consent from the people.

We try to improve the animals' health, which is pretty easy when you have a lovely drug like ivermectin. We also try to provide ways to control dog numbers, which seem to be a problem across the communities--we usually use surgical desexing and sometimes contraceptives and euthanasia.

We try to train interested members of the community so the programs can go on when we're not there. We aim to provide a dog program that is ongoing, professional and supported by community members.

We prefer to use ivermectin orally rather than as an injection. We can't get close to quite a few of the dogs. I can't get near them because I smell and look different, and sometimes even the owners can't go near them. We can't catch them. But these dogs quite like bread and margarine, and one man in the Ranger program came up with the idea of throwing buttered bread to the dogs with the drug on it. When he first did it the dog ran away, so the owner threw the bread and the dog eventually got it. Sometimes drug delivery can be quite a challenge.

**Getting informed consent.** How do we get informed consent? It's not easy.

In the Top End, English is sometimes a second language, sometimes a ninth language. English is not usually the language used in the home. So a big part of getting consent involves translation--people from the community helping us to get the message across.

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<sup>2</sup> This paper is an edited transcript of the authors' presentation.

Another issue is that the diseases dogs have are usually not understood from a Western point of view. We can say these dogs have got a little mite under their skin which is breeding and then jumping on to the next dog and spreading the disease, but in our experience very few people have heard that story. It takes a while to get these kinds of concepts across. I'm not saying there is not a lot of knowledge about dogs in communities; a lot of these places have dog dreaming and dogs are a huge part of their cultural heritage. But from a Western point of view it can take a while to talk about, say, life cycles of parasites.

For a lot of reasons, consent has often not been gained in the past. People have gone in with dog programs, usually with the best of intentions, but consent has been neglected. It's a key point for us.

**Working with locals.** We work closely with the locals, for example, Environmental Health Workers. In the Northern Territory there are only 11 communities out of a great many that have the Environmental Health Worker program, so for the rest of the communities we have to find people who are interested in the job. That can take some time, due to the nature of the work. For most people anywhere, it's a big thing to watch a vet opening up a dog while it's still alive, let alone to help the vet. Just medicating the dogs can be dirty, tiring and sometimes dangerous work.

It really helped Stephen and I to a huge extent to be introduced by somebody the community already knows. That is why we originally worked with people like Phil Donohoe as icebreakers. That worked well.

When we get to the communities, we find it extremely important to sit down and talk to all the head people, especially the traditional owners. We spend time listening to what they want us to do and getting permission, firstly to talk to people, and then to do our work. Once we've done that, we can go house to house and talk to people individually. We use slides, whiteboards for life cycles, specimens and demonstrations--anything on hand that will get the message across. Often we use as little English as possible and a lot of pictures. If people are bored or busy, we adjust to how much time they have.

The key point is that *the owner's decision is final*. It's really hard when you have an old lady who says, 'Go away, you're going to kill my dogs'. You can say, 'No, I don't want to kill your dogs' and talk and talk about it, but in the end you have to walk away. There's no point in insisting; everyone will know about it 24 hours later and your dog program will be dead in the water. The owner's decision is always final. It is more important to gain people's trust over a long period of time than have a quick fix.

Spending time is incredibly important. We try to spend a couple of weeks every visit. It takes people quite a while to work out what you are doing if they have never had a vet visit before. A couple of weeks allows for the grapevine to work. People who originally don't want you anywhere near their dogs usually come to you at the end of two weeks, once they have had the opportunity to see you work and see the benefits to the dogs.

## **Stephen Cutter**

**What we do.** The main thing we do is surgical desexing. Between us we have personally desexed about 1300 dogs. The numbers aren't that important; it's the time taken to do it that is important. Over each year Jenny and I spend three to five months out in communities. It's important to take the time for things to happen.

We've also personally given over 4000 doses of ivermectin, and many more thousands have been given by the people we work closely with. In dogs ivermectin is effective at controlling sarcoptic mange/scabies (*Sarcoptes scabiei*) and parasitic worms:

- \* roundworms (*Toxacara canis*, *Toxascaris leonina*)
- \* whipworms (*Trichuris vulpis*)
- \* hookworms (*Ancylostoma caninum*, *Ancylostoma braziliense*, *Uncinaria sp*)
- \* threadworms (*Strongyloides stercoralis*)
- \* throatworm (*Oslerus osleri*)
- \* tissue worm (*Dipetalonema reconditum*)

It also aids in the control of

- \* demodectic mange (*Demodex canis*)
- \* heartworm (*Dirofilaria immitis*)
- \* Brown dog ticks (*Rhipicephalus sanguineus*)

Its effect on fleas is debatable.

We have given over 100 Covinan<sup>®</sup> (proligestone, Intervet) injections. Covinan is a long-acting contraceptive. This prevents a bitch coming on heat and hence conceiving. The effect is temporary and unless repeat injections are given every five months, the dog will come on heat six months after the injection and may become pregnant. This drug is currently the safest and best non-surgical method of preventing breeding. It is primarily used when we cannot convince the owner to have the dogs desexed or when the dog is too ill to be desexed. Primarily this is the dogs with transmissible venereal granuloma (TVG).

TVG--a type of sexually transmitted cancer--is very common in some of the communities we go to. It's a dog disease only and people cannot get it, but it's a major cause for concern for owners in a lot of communities. It's very common in some areas--up to 15% of dogs can be infected at any one time--but it's mostly unknown outside communities. It debilitates infected dogs and many die from it. The dogs also leak fluid and blood, which, not surprisingly, people find unpleasant.

We have also desexed over 100 cats and several pigs.

**Co-workers.** The people we work closely with--Environmental Health Workers, Rangers, Tiwi for Life workers and others--are critical to any dog program. They work as interpreters both linguistically and culturally. They are vet assistants and are very good at that. They work as cultural guides, steering us through difficulties and advising us. They are hosts and provide year-round program support. They are a contact between the communities and us.

**Diseases.** A quick overview of the dog diseases we encounter most. Mange (scabies) is very common in all communities and is the most obvious disease because you can see it. It's itchy and the dogs are very uncomfortable. It's a major form of dog suffering. Fortunately it is very easily treated with ivermectin or other endectocides. The dogs will almost always get better.

Intestinal worms are also common. Hookworm (dog hookworm, not human) kills a lot of puppies. Again, we use ivermectin. Heartworm is a major cause of adult dog death, but again it is sensitive to regular dosing of ivermectin. TVG, in the communities where it is present, can be quite common and a significant cause of dog death. Traumatic injuries such as being run over by a car or hot water burns are also very common, but they have actually declined since the program was established. Fleas, lice and ticks are very common, but prevalence varies enormously, from none to plague proportions.

**Results.** The main result is the dogs are healthier and certainly happier. Mange has dropped in some communities by 100%, in others by lesser degrees (the smaller communities get more total control). TVG has disappeared in some communities, probably temporarily, and there has been an overall decline in some regions. There is less heartworm and fewer intestinal worms. The dogs fight less

between themselves, primarily because of fewer testicles. There are fewer car accidents--the dogs are fitter and more likely to get out of the way. There are fewer starving dogs and they are less likely to head bush because they are happier where they are--there is more food to go around.

Regarding dog numbers, people will tell you there are thousands and thousands of dogs, but as a general rule almost all estimates are over-estimates. Individual houses may keep a lot of dogs, particularly the elderly, but the dog numbers in the whole community aren't necessarily massively high. Palmerston, the suburb of Darwin where I live, for example, has one dog for every five people. Most Aboriginal communities we go to have roughly one dog for every 10 people.

## **Jenny Wells**

**The benefits of healthy dogs.** Other speakers here have or will speak about animal to human disease transmission. In a community environment, there are too many variables to assess how important these zoonoses are. For instance, 3 months after a dog program, I could ask clinic staff if they think they have seen fewer people with skin complaints. They may say yes, but there might have been a human scabies day held, or royalties might have come in so people are eating more, or there may have been a change in season. There is no way of accurately assessing dog health programs on this level.

But there are other levels. Most importantly, what do the community members think? Many of these people have seen a lot of programs come and go. So do they notice a difference in their animals? Is it positive or negative? Does anyone care about the state of their animals?

**Desexing.** Following are some comments from people in communities with more than 50 per cent of their dogs desexed. 'It's so quiet in the community.' 'There's less fighting.' 'We can get a good night's sleep.' 'We've got this female dog, and the male dogs don't humbug now 'cause you've taken out her puppy bag and she's got a really good life.'

The last comment is a reminder that we desex male and female dogs in proportion. Otherwise, if more females are done, entire males tend to harass the remaining females in packs.

**Gut worms.** These kill a lot of pups and cause diarrhoea. That means sick puppies and diarrhoea in the house, rather than healthy pups and solid stools. Says one mother, 'It's really nice that the kids know the puppies are going to live now; before they'd get attached to them and then they'd all die.'

I would suggest that kids who value their pups are more likely to treat them well throughout their life, and would be more interested in learning how to care for them.

Ticks are another parasite that occur in plague proportions in some areas. It can sometimes take weeks or months for houses to get sprayed. In the meantime people have showed me ticks climbing up their walls and crawling around their beds. Killing ticks off the dogs is at least partial prevention of the problem. Dogs are also more likely to be handled if tick-free.

It is amazing to see how ivermectin and desexing will improve a dog over a matter of months. You can pick the ones you've done just by how fat and healthy they look. They look magnificent--in contrast to untreated animals. Most people don't want to touch their dogs if they look sick, so the dogs can become isolated from their families and get fed less, getting sicker in the process and often becoming pests to other people.

**Education.** When we operate we show people how we are washing our hands, and try to discuss a bit of germ theory. When we talk about anaesthesia, we say that what we do for the dogs is something that also happens in hospitals. A lot of people have to go to hospital in Darwin, and many of the old people don't come back. It is potentially helpful to show an anaesthetic procedure,

describing how the gas anaesthetic machine works, and get across that this, in a basic way, is how people are anaesthetised in a hospital.

## **Stephen Cutter**

**Other animals.** People keep a wide variety of other animals in communities. Cats are moderately common in some communities. When the program was initiated there was an extremely high turnover of kittens. Cats were rarely older than six months or so and there was a constant source of kittens. When the cats are desexed their overall numbers drop quite dramatically (because there is no new replacements), and those cats that have been desexed live longer and become fat and healthy and much better at avoiding the dogs.

Pigs are also common in some communities. When they are older, especially, they can become quite damaging and aggressive, particularly if they are not castrated. They are good at digging up sewerage pipes and foundations.

**Euthanasia.** This is a very important subject. It has already been alluded to by people as a make or break thing for dog programs. If you handle it badly you can be more or less thrown out of a community or find you can't do any work because everyone avoids you.

The primary thing is that vets need to be clear that they are going into the communities to help the dogs, not kill them. Bullets are cheaper, but this approach is totally unacceptable to the vast majority of community members. Killing dogs alone, as a general rule, doesn't seem to control the numbers; it just seems to promote a rapid turnover.

We've established some important rules which we wouldn't really vary from. It's important, especially early on, to be quite strict with these. They are particularly important where there are ceremony dogs involved.

- \* If an owner asks us to euthanase a dog, we do it. It's not our decision; it's theirs.
- \* We only recommend euthanasia if the dog is extremely sick.
- \* We always offer alternative treatment so the owner can make an informed decision whether euthanasia is a better option.
- \* If we do recommend euthanasia where the owner hasn't specifically sought it, we always go away for a few hours so they can think about their decision.
- \* Consent must be unequivocally given. There must no doubt in anyone's mind--owner, vet and so on.
- \* All this makes it particularly important to explain things in the appropriate language so there are absolutely no misunderstandings. We trust the people we work with and ask them to let us know if there are any problems.
- \* We also have a couple of rules on how to establish whether a dog is truly unowned and whether euthanasia is an appropriate response to that. It takes a couple of days to check with everyone around, including council members.

## **Jenny Wells**

**The future.** How do we make these programs sustainable? Most importantly by involving local people. One guy we've got involved is a Ranger and his day job is collecting eggs from broody salt-

water crocodiles, so the dog program is a bit of a rest for him. It's good to try to get three or four people involved in each program.

It's not a bad idea to hook up with another program that's already running in the community. Then everyone knows what's happening. For example, the Rangers' programs have decided they are interested in helping with the dog program because it's useful and beneficial to their place.

It would be good, if possible, to make this training part of a formal education process. Qualifications are important. They're something tangible people can work for, and they mean the training can be appreciated in the community and outside as well. Ultimately this is the only way programs are going to be sustainable: if people who live in the community take control of them and run them. There aren't enough vets around. Perhaps it's up to us to get the momentum going and then eventually to step back, supporting them with the surgical procedures we have to do and perhaps a consultative role.

**Funding.** Funding can be hard to extract, and these programs are no exception. It's worth noting that in many communities people had no concept that vets even existed, so it's a bit of an ask to expect people to pay for services they don't know anything about. As visits become more routine, then individual payment is a question to be answered in consultation with local councils and other funding bodies.

So who pays us? Community councils, Outstation resource centres, organisations like ATSIC and health boards. When individual communities pay, funding can change extremely quickly from year to year and sometimes from week to week. People in top positions change, and it's up to the vet to make sure they are informed about the history of the program, how much has been already achieved. Visual documentation in the form of photos and videos is an absolute priority (I can say that now with hindsight)--a new council clerk may have no idea what a 'leatherback' really is. It is often the community members with the most dogs, or the most loved dogs, who are our greatest supporters. In these times, it comes down to getting funding from anywhere we can.

### *Discussion from Stephen Cutter and Jenny Wells' talk*

**Rick Speare** I was interested to see your prevalence of transmissible venereal granuloma had reduced to zero in some communities. What do you think was the reason for that?

**Stephen Cutter** My assumption is that it is primarily the desexing of the dogs. More dogs are no longer mating so they obviously won't acquire it.

The additional factor is that as dog health has improved, people have become less and less tolerant of unwell dogs. So we are now euthanasing quite a large percentage of the dogs with transmissible venereal granuloma. Of the 250 dogs we have euthanased, probably 70 or 80 had transmissible venereal granuloma.

In lots of smaller communities and one larger community it has completely vanished. The larger community was one that had very powerful people who were very keen to get rid of this particular disease, so we had quite a large number of euthanasias. We also desexed the majority of the dogs there.

**Anne Quain** (*first year vet student, Sydney University*) The injuries by hot water to dogs: could you elaborate on that a bit more? Also, in all of these programs, given the circumstances in which you are working, you must have had deaths under anaesthesia. If that does happen, how do you deal with it? Having gone to the trouble of getting trust from the community, how do you explain to them about deaths under anaesthesia that are unavoidable?

**Jenny Wells** Hot water burns are usually due to people getting pissed off with the dogs and throwing the billy at them. It's the way it is.

In the last four years Steve and I have tallied up 10 deaths between us, and we hate it every time. It causes a great deal of sorrow, obviously for the owner and also for us. You have to explain that it happens. Sometimes there are good reasons for it and sometimes it just happens, so deal with it personally.

**Jack Shield** Various speakers have talked about the advantages they have witnessed following ivermectin programs, and that's been the experience also in Queensland. But there has been very little said about disadvantages of using ivermectin and these are considerable. The Queensland experience is that ivermectin invariably created a big population boost. Our experience is that it is very difficult to counteract this with contraception or culling.

**Stephen Cutter** In all communities for the first three years we have had substantial reduction in dog numbers and they have continued to fall every year. Usually we get a drop by about half. In the last year, however, I have seen, in several communities, a rise in dog numbers--still well below the original numbers but they have increased. I think this is because we are getting better survival of both dogs and puppies now; and because they are living longer, the recruitment rate into the population is gaining on the rate the dogs are being removed.