

“ABC Radio Innovations”
Interview by Desley Blanch
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Night Predator Deterrent - Foxlights
Foxes deterred by the night time scarecrow

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TRANSCRIPT :

DESLEY BLANCH: Ian Whalan is a third generation sheep farmer who four years ago, came up with the idea of using lights near lambing ewes to deter foxes from killing the new-born lambs. Foxlights - the night predator deterrent is a series of lights inside the device to give the impression of human movement at night time in order to keep foxes away from lambs, goats, free-range hens and other vulnerable animals.

Ian Whalan talks to us from Sydney, and describes the difficulties farmers have in keeping foxes from attacking and killing newborn lambs.

IAN WHALAN: Using the same principle as what most other farmers do, that is with Ten-Eighty poison bait, which you put out just prior to lambing, some night shooting with a spot light to try and get whatever numbers you can but you can never catch up with all animals and foxes are renowned for traveling quite large distances and so even though you might put baits on your own property, you never clean them all up. There is quite a problem with numbers increasing continually.

DESLEY BLANCH: And what made you think of lights as a workable deterrent for foxes? I mean I just have this image of a cold night and you are sick of standing out there guarding your flock and you saw the light so to speak.

IAN WHALAN: No, in fact it was a little different. I think I was lying in a warm bed thinking that I was very lazy and I should be outside guarding my lambs. And the idea came to me from the fact that well, back in the old days, shepherds used to live with their sheep and camp with their sheep, at night time in particular and so I thought well how can you go about in putting that presence in the paddock and I thought well, with a light, if I could have some form of moving light then be able to give the perception of somebody wandering around through the paddock of a night time.

DESLEY BLANCH: So okay, a word picture of the device. What size is it for instance?

IAN WHALAN: Twenty centimeters tall, which is about 6 inches by around about 5 to 6 inches wide, designed to sit on top of a star picket or a steel post.

DESLEY BLANCH: Out in the paddock somewhere on a corner or something?

IAN WHALAN: Yeah that's right. Sheep will always go to a high ground to camp, so you tend to concentrate them more so around the camp and a couple out on the perimeters looking for the higher ground so that you can get maximum visibility. They work a little bit like scarecrows.

DESLEY BLANCH: So how is it powered and how many hours do you get from that power source?

IAN WHALAN: It's powered from a standard 6-volt square battery. Your running time would be anywhere between say three to six months. Now there is such a variance there, because in wintertime your nights are a lot longer than summer time. So if you are running them of a winter time, you would not get as long in flashing power.

DESLEY BLANCH: You're not running around switching them on though as it turns dark?

IAN WHALAN: No, no indeed that's another thing, I said laziness is a big key on this. Ah, no there is a light sensor inside them. As the sun goes down and it darkens off, they will start flashing just before dark and same thing when the sun rises.

DESLEY BLANCH: And they would need to be waterproof because there's all sorts of weather?

IAN WHALAN: Indeed.

DESLEY BLANCH: So how many devices would you need for a paddock or a field?

IAN WHALAN: Well, it varies greatly depending on the terrain you may have. If you've got very hilly country or very heavily timbered country, you would need more light. For example, in a paddock that I might have which I would call hilly country but yet basically cleared, I can use five lights to protect

my sheep without any trouble and that is basically with three lights around the campsite and then two lights out on a further perimeter.

But when you go out into a very large acreage farms where they might have 1,000 acre paddock or 2,000 acre paddock, what I am suggesting to people there is to just concentrate them around the camps. Sheep will always go to the same camp area to sleep of a night time. If they happen to be having a lamb on that night, they will go to the perimeter of their camp, rather than wandering off down into river gullies and flat country.

DESLEY BLANCH: So how close do the lamps need to be to the lambing ewes themselves? I mean they don't look at them and run off and think similarly to how the foxes are meant to?

IAN WHALAN: This is a fear that I had when I went into using LED lights, because LED lights are a lot stronger and brighter than a conventional bulb. I thought that the ewes would take fright. But no, the ewes will sleep right beside them and have no fear of them at all. But what I would suggest is setting them up a day or two before lambing, in particular on the first year, because sheep may look at them being a little strange, but no, they have absolutely no fear of them at all.

DESLEY BLANCH: So in what order do the lights flash and to give what impression?

IAN WHALAN: Well, the order is a random type of flashing that has no set dark space or no set light space. The sequence of flashing is over four or five different styles.

DESLEY BLANCH: That gives the impression of somebody walking or something I guess?

IAN WHALAN: Yes, that's right and from a distance, if you are looking at it from 300 or 400 meters away, the appearance is of somebody walking around with a flash torch. The fox looks at it and thinks hmmm, there could be a person there. I won't go near that area.

DESLEY BLANCH: Thank heavens they are smart!

IAN WHALAN: (laughter) That's right, we've just got to stay a little bit ahead of them, that's the thing. They are very smart animals, foxes. They are very cunning and the fox will come right to your back door even if you leave a light on. This is a thing that is so difficult with them, they are so damn cunning.

DESLEY BLANCH: I need to ask you Ian, how big a problem are foxes in Australia?

IAN WHALAN: A huge problem, in fact foxes came to Australia, well, soon after settlement and are quite devastating to our native fauna as well as our livestock and of late, Ten-Eighty baits are not being used as frequently, because farmers now need to be accredited poison handlers to use Ten-Eighty baits, so a lot of farmers are saying well, I'll give it a miss this year and foxes are breeding faster than ever before.

DESLEY BLANCH: And there is no natural predator?

IAN WHALAN: No, no, and the same with feral cats. I think between foxes and feral cats, our wildlife have been in many cases near decimated.

DESLEY BLANCH: What about wild dogs, such as our native dingo?

IAN WHALAN: Well, this is something that I haven't started work with, but I have got people who are interested in testing them against wild dogs. My theory is that anything that has got a natural fear of man, these lights will help deter them. In particular, if something has been hunted with a spotlight, then seeing this light would be enough for a wild dog or a fox to just stay away from that particular area.

DESLEY BLANCH: How did you trial your device? I mean who did you go to, and over what period of time?

IAN WHALAN: Well, I trialled it at my own place for a while, because I was rather sceptical as to whether the idea would work and went two years without losing a lamb that I could find, that is like a carcass or anything left behind. And then I took them to a neighbour of mine who I said well, put these lights in your paddock and just tell me what happens and he like myself was rather sceptical to start with, but came back after his lambing season very, very pleased with the results and being a free range chicken farmer, set them up with his chicken pen for the next six months and found that he lost no chickens with foxes.

DESLEY BLANCH: Wow!

IAN WHALAN: And yet he was shutting up his chickens of a night time, letting them out in the morning, and foxes were coming anywhere from 9, 10 o'clock in the morning and taking his chickens. But what he found was that because the foxes didn't come around the chicken house of a night time, (they could smell the chickens), then they didn't hang about to return the next morning to take stock away.

DESLEY BLANCH: So then what happened once the lights were removed at the end of the trial? I mean did old Brer Fox return?

IAN WHALAN: Well, this is what he's saying to me. I took the lights away because they were starting to go flat and he's phoning me up saying please can I have some more lights back, because the foxes came back within a few days of the lights being taken away.

But as far as caring for lambs, you'd set them up just prior to your lambing season finishing and then taking them down again once you're confident all your ewes had lambed. Because I really think that they do work better over that shorter period of time, rather than being run for 12 months, although chicken farmers tell me they have had them work for quite some time.

DESLEY BLANCH: Well, you have some ideas for the device with other animals. We're mentioning possums here, which are, you know, they sort of come into our household areas. So how would you use the lights against possums?

IAN WHALAN: Well, I do believe that, because possums are totally nocturnal, that if you happen to have a possum in your roof and the thing is it's very hard if you go up into your roof to find out just where he is sleeping. He's in amongst the rafters somewhere. If you were to set one of these lights up within your roof, within the next two or three days he would find somewhere else to go and it would be a matter of knowing where he is coming in, blocking that hole up and then you'd be able to vacate your roof of possums quite easily by working that way.

Now as far as possums in the garden, and I've been asked this by a number of people. I have not tested them as yet, but one person who had a light on his chicken house had an ornamental tree in his front yard that was being stripped by possums, so he thought oh, I'll just take this light out and see what happens. Set the light up in amongst the tree and the possums just didn't return. Now once again, I have got to say that's not been fully tested, but it may work on a smaller scale.

DESLEY BLANCH: And I suppose cost effectiveness. I mean you would have to, say, compare it with the value of a lamb, how do you work it out?

IAN WHALAN: Well indeed, like fat lambs this season gone were selling for anything between \$AUD120 to \$150 per head, so you've only got to save one lamb and you've paid for two lights. So these lights I think in many cases would pay for themselves well and truly within their first year.

DESLEY BLANCH: Well now Ian, as you're an inventor or developer or whatever you might be, you will have to have a next step. So what's your next step for your device?

IAN WHALAN: Oh, my next step is to turn it solar. When you are looking at somebody who is needing protection on a long period, 12 month round period, I hope to develop a solar powered system that will generate its own power and be able to put it away and more or less just let it do its job.

DESLEY BLANCH: Sheep farmer and fox fighter Ian Whalan from New South Wales with his night predator deterrent, Foxlights.