

TICK Pestilence

Early in this season many parts of the summer rainfall area received good rains, followed by warm weather. Such conditions are ideal for game birds such as Guinea fowl, but also for TICKS, which have undergone a population explosion...

Thousands of Guinea fowl, the favourite saying goes. In many cases this turns out to be twenty-something birds running like the clappers at 500 yards. But this year really has been a good season for Guinea fowl. Reports of very good populations were received from Frankfort, Steynsrust and Memel in the Eastern Free State; from Tuinplaas and Marble Hall in the Springbok Flats, Thabazimbi and Warmbad in the Northern/Limpopo Province; and from Kimberley and Hopetown in the North-west and Northern Cape.

The ecologists say that all the good rains plus warmth in November and December are good breeding conditions for Guinea fowl. But these conditions are also ideal for ticks, those biting and blood sucking carriers of tick bite fever in humans and of biliary and ehrlichiosis in dogs, not to mention toxicoses caused by the poisons which occur in the saliva of many tick species such as the bont-legged tick.

Under favourable conditions, some tick species can lay up to 18,000 eggs, which hatch to become minute larvae, which attack a host, suck blood and drop off within days. They then moult into nymphs, which again climb onto hosts to engorge, then drop off again to moult into adult ticks. Some ticks attach only once in their life cycle to a host (single host ticks), others attach twice (two-host ticks) and others – as in the life cycle described above – attach three times (multi-host ticks). In many cases the larvae and nymphae attack other hosts such as small rodents, which makes it difficult to control them.

The larvae and nymphs are known as seed ticks. They are very small (pinhead-size) and often one does not even notice them on one's dog. But their bites are as dangerous as those of adults.

Ticks are controlled on dogs by insecticides, which are applied as dips, sprays or pour-ons. The use of pour-ons has become very popular, with the advent of long-acting compounds which bind with waxes on the skin of the dog and can kill ticks and fleas for more than a month. The regular, monthly use of

such products, such as Frontline from Merial or Dog Spot Plus from Bob Martin, effectively breaks the life cycle of fleas and in the long run, stops reinfection.

The most cost effective tick control remains dipping, but this practice may have side effects. According to experts, some insecticides have chemical structures similar to agents used to control functions of the brain such as anti-depressants. They affect the stamina and performance of dogs and

unable to keep up their work rate. 'We have only four dogs (German Shepherds) in the unit, so we have to utilize the working time we have available properly,' he says. 'Frontline is gentle, works quickly and once their coats are dry the dogs can immediately carry on with their tasks,' says Inspector Dougie. The members of the unit felt so strongly about Frontline that they bought and paid for Frontline out of their own pockets. Fortunately, Merial later agreed to supply the unit with



their ability to concentrate when working.

According to Dr Viljoen, repeated observations during field trials have shown that dogs treated with some compounds are unable to sustain their work rate and fade badly during trials – even where the insecticide has been applied a few days in advance. 'Some dogs seem to lose their sense of smell, while others simply "hit the wall" and stop working', he says. 'We have not had such experiences with Frontline,' he says, 'and I only use this product, despite its price.'

When Dr Viljoen first made these claims, he was met with considerable skepticism from various sources (including from the writer of this article), but his field observations have been substantiated by the Midrand Dog Unit of the SA Police Services. According to Inspector Dougie, the dogs became lethargic after dipping and

Frontline for the next twelve months.

Similar experiences were reported by members of the SAP Dog Unit in Pretoria.

What about people exposed to these ticks? The liberal spraying of Bayticol, made by Bayer and available over the counter at pharmacies, is recommended. Bayticol is a potent synthetic pyrethroid which is deadly to ticks, especially seed ticks, but about as safe as brown sugar to mammals and birds. One can spray Bayticol on one's clothes and ankles and it effectively kills seed ticks even before they can start to attach.

After a recent shooting day near Warmbad the writer's own dog was covered by hundreds of seed tick bumps in his skin. The ticks were almost impossible to see. The direct spraying of Bayticol on the dog wiped out the seed ticks and the bumps (and the ticks) were gone by the next day.

— Raoul vd Westhuizen