Neospora: Wild dogs causing abortions in cattle herds

Injury and deaths caused by wild dogs hunting livestock can have a significant negative impact on primary production; however, another problem caused by wild dogs and foxes is their potential to pass abortion causing parasites into cattle herds. This further highlights the importance of efficient and effective wild dog and fox baiting and trapping programs being maintained through areas of Victoria where these species are prolific.

The parasite “Neospora caninum”, commonly known as Neospora, can be transferred as simply as cattle grazing on pastures or from feeders that have been contaminated with wild dog faeces. Like Pestivirus (BVDV), pregnant females that have ingested this parasite can pass it onto calves in utero and then run the risk of either:

• Aborting their foetus (typically late term)
• Producing a calf that is a Neospora carrier. If these carrier calves are female, they can then also cause further problems, by infecting or aborting their own foetuses when they in turn reproduce, potentially causing losses through several generations.

While losses haven’t tended to be observed due to ill thrift in affected animals, there have been reports of infected calves being born underweight, with limb abnormalities, a lack of co-ordination, decreased reflexes and sensory perception, and they may also appear ‘pop-eyed’. Fortunately, Neospora has never been related to any human health issues; however losses in income from lowered calving percentages are obviously of concern to all producers.

The perpetuation of Neospora in beef and dairy herds can also lead to further infection in fox, and wild and domestic dog populations if they ingest contaminated afterbirth. This leads to constant potential exposure of a herd to infection. In some severe cases, massive production losses can be incurred due to “abortion storms”, where a large number of abortions occur in a short period of time, and some studies suggest that Neospora is a leading cause of abortion in Australian herds.

Unfortunately, there is currently no vaccination available or definitive method of protection or control that producers can employ to help protect their herd against Neospora. Prevention is one of the best measures that can be utilised to minimise losses. Minimising the number of wild dogs and foxes present, and (where possible) reducing the scavenging of afterbirth by wild and domestic dog populations, will aid in decreasing the number of carriers and reduce transfer of the parasite within and between cattle and dog populations.

If significant abortions are observed in a herd, blood tests, or tests on aborted foetuses can be performed to determine if Neospora is the cause of the losses, and if so whether any strategic culling decisions need to be made.

While being able to provide no simple answers to producers is frustrating, having a methodical approach will assist them, and minimise losses as much as possible. This includes:

• Being aware that Neospora can cause abortions in cattle
• Be observant and monitor abortion losses
• If losses are being incurred, establish what is actually causing them
• Be proactive about reducing wild dog and fox numbers
• Before making any decisions about culling, discuss with your vet and undertake appropriate blood and/or foetus testing to establish what the status of your herd is in relation to Neospora infection, and what the best course of action for your specific situation will be

Take home Neospora messages:

• Neospora can cause abortion losses in your herd
• Be vigilant about observing and accurately diagnosing the cause of any losses incurred
• Employ strategic and coordinated Wild dog and fox control programs
• Phone your vet, local DPI or the Disease Watch Hotline on 1800 657 888 if you suspect FMD.

For further information, please contact the VFF Livestock Group on 1300 882 833 or email Zoe Moroz at zmoroz@vff.org.au

Links

Wild Dogs and Dingoes in Victoria

NSW Agriculture: Neospora caninum infection in cattle

QLD Government: Neospora caninum

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