

SHOULD I JOIN AN ALPACA HEALTH MONITORING PROGRAM ?

(Bob Kingwell, Monga Alpacas)

In February 1993 a 12 months old male alpaca died in Victoria after a history of poor growth and diarrhoea. Post-mortem tests revealed that the alpaca had died of Johne's disease (JD). This was the first known alpaca case of this disease in Australia. Over the next 15 months a further 9 alpacas, either died, or were killed, because they had JD. In all, since 1993, 15 alpacas have died showing clinical signs of the disease, 10 have been killed and confirmed to have had the disease, and 6 have been killed because they were suspected of having the disease but subsequently found not to be infected. The last known case was detected in February 1996 when a 6 months old female cria tested positive to a faecal test. This alpaca subsequently died with clinical signs of JD. She was 15 months old. The good news is that a further 7 alpacas, which at first tested positive to the disease, subsequently tested negative and it would appear that these animals were able to successfully shed the disease.

The voluntary Alpaca Market Assurance Program (Alpaca MAP) was established in 1998 in response to these deaths. The program deals only with JD, and is "a herd classification scheme to assure breeders and their clients that participating herds have been objectively assessed as having a low risk of being infected". The program is currently managed by Animal Health Australia (AHA). Details of the program are available on their website at

[www.animalhealthaustralia.com.au/aahc/programs/jd/maps\\$/alpacamap.cfm](http://www.animalhealthaustralia.com.au/aahc/programs/jd/maps$/alpacamap.cfm).

Herds are assessed by the number of negative herd faecal tests for JD carried out, and involve three levels. The program must be supported by a herd and property management plan that is overseen by a certified veterinarian.

Monitored Negative 1 (MN1) is a moderate assurance level and requires 1 negative test of the herd. The Queensland alpaca Protected Zone and the Western Australia alpaca Free Zone now both have an equivalent status.

Monitored Negative 2 (MN2) is a high assurance level and requires 2 negative tests of a herd over at least 1-2 years.

Monitored Negative 3 (MN3) is the highest assurance level and requires 3 negative tests of the herd over at least 3-4 years.

In order to maintain the herd status, MN1 and MN2 herds must undertake an annual veterinary audit, and undergo a herd Maintenance Test every 2 years. MN3 herds require the annual audit and must undergo testing every 3 years.

So what are Protected and Free Zones? They are JD Zones, which are declared by the Animal Health Committee, based on the potential for that zone to contain JD infected animals of a particular susceptible species. A Protected Zone for a particular species is one in which the presence of JD exists, or may exist, and is strictly monitored and controlled. Queensland is the only State with an alpaca Protected Zone status. A Free Zone may be declared if it has been assessed as being free of JD in the population of susceptible species, and strict monitoring and controls are enforced. Western Australia is the only State with an alpaca Free Zone status.

To accommodate the entry of new animals into the herd, a number of animals, totalling no more than 10% of the number of breeders in the herd, may be added each year from herds of one status lower. These animals must be faecal tested-negative after 12 months for the herd to maintain status. There is no restriction on the number of animals of equal or higher status that can be introduced annually.

Faecal testing a herd is not cheap, particularly if it is large. This prompted Richard Dixon, now an Honorary Life Member of the Australian Alpaca Association Ltd (AAA), to develop an alpaca health monitoring program, which would cover all diseases, and be both simpler and cheaper than the Alpaca MAP. The result was the Q-Alpaca Program, which started in 2005, and is endorsed by AHA. It has also been incorporated into the Alpaca MAP. The Program is now being administered by the AAA, and is available for all alpaca owners, regardless of whether or not they are members of AAA. Details of this program are available on the AAA web site at www.alpaca.asn.au/AAA/qa/intro.shtml.

In order to join Q-Alpaca, a herd must not be known, or suspected, of being infected with JD, and a written agreement between the owner and an approved veterinarian must be provided. A herd and property management plan, similar to that required for the Alpaca MAP, must also be in place. Regular faecal testing is not required however post-mortem examinations by an approved veterinarian are required on all animals that either die, or are killed.

There are no restrictions on introducing new animals from Alpaca MAP herds, or other Q-Alpaca herds that have been in the Program for at least 6 months. Non-assessed alpaca can only be introduced after they have been isolated and faecal tested-negative.

The two programs, to some extent, complement one another. If you are already in Alpaca MAP, it is a very simple process to join Q-Alpaca, since you already have an approved veterinarian with a herd and property management plan in place. It is simply a matter of filling out the appropriate forms, quoting your Alpaca MAP number, and waiting for the paperwork to be processed. Joining Q-Alpaca also gives your MAP herd a status credit, which means that an MN1 herd becomes MN2, and an MN2 herd becomes MN3. The best part however is that when you join Q-Alpaca, you are no longer required to have your herd regularly faecal tested to maintain your Alpaca MAP status.

If you are in Q-Alpaca, it is also a simple process to join the Alpaca MAP. You will already have an approved veterinarian with a herd and property management plan in place. Provided your herd has not been kept with other susceptible animals (cattle, goats, deer, other camelids) within the last 12 months, then once that herd is faecal tested-negative, it can enter Alpaca MAP with MN2 status.

There are advantages in being in both Q-Alpaca and Alpaca MAP. If you are already in Alpaca MAP then, if you join Q-Alpaca, you are no longer required to regularly faecal test your herd. If you are only in Q-Alpaca, then although your herd is equivalent to an MN1 herd in Alpaca MAP, since it has an MN1 equivalent status, it cannot enter a MAP herd unless it is faecal tested negative. This means that Alpaca MAP breeders are not able to purchase, and immediately introduce your animals into their herds. Q-Alpaca animals can now enter the Queensland Protected Zone without the need for further faecal testing. If however you joined the Alpaca MAP program then you would enter at MN2 level and the only herds you would not be able to sell to would be MN3. Western Australia will now accept MN1 alpacas, and Q-Alpaca animals that have been in a Q-Alpaca herd for at least 6 months.

Why should I join one of these programs? So far, 25 alpaca have died or been killed in Australia because they had Bovine Johne's disease. The fact that there have been

no more deaths since the Alpaca MAP was set up in 1998, attests to the success of the program. With hindsight, the initial Alpaca MAP may have been an overreaction to the situation at the time, but it worked. We all owe a great deal of thanks to the veterinarians who drew up the program, and to those breeders who supported the program, and thereby helped in the, dare I say, eradication of this disease from the Australian alpaca herd. Unfortunately we can never be sure that the disease will not return. It is fortunate that the alpaca seems to be extremely resilient and that it appears to have a natural resistance to Johne's disease. The source of the original infection back in the early 1990's has never been officially found, and that leaves the industry in the uneasy situation of not knowing whether or not, or when, it will return again. The best we can do is to remain vigilant and that means encouraging alpaca owners to join one of the programs. If you are concerned about a repeat of the 1990's, then I suggest you join Q-Alpaca. If you are planning on breeding, and selling animals, then there are advantages in also joining Alpaca MAP.

References:

1. Harkin JT (May 1998) Johne's Disease and Australian Camelids ACVA J14: 6-11.
2. ALPACA MAP Rules and Guidelines of the Australian Johne's Disease Market Assurance Program 3rd Edition February 2005.
3. Dixon R Q-Alpaca Program Second Annual Report March 2007.