2015 Alpaca Health Survey

31 responses, Covering the time period of September 1st 2014 Though August 31th 2015.

Census

<table>
<thead>
<tr>
<th></th>
<th>Huacaya</th>
<th>Suri</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult Males</td>
<td>92</td>
<td>9</td>
</tr>
<tr>
<td>Adult Wethers</td>
<td>66</td>
<td>2</td>
</tr>
<tr>
<td>Young Wethers</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Adult Females</td>
<td>353</td>
<td>42</td>
</tr>
<tr>
<td>Cria/Tui Males</td>
<td>45</td>
<td>13</td>
</tr>
<tr>
<td>Cria/Tui Females</td>
<td>65</td>
<td>9</td>
</tr>
</tbody>
</table>

Total Population: 698 alpacas

Cria Born during survey period

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>66</td>
</tr>
<tr>
<td>Female</td>
<td>81</td>
</tr>
</tbody>
</table>

(Note: this ratio bucks the normal trend of more male cria than female cria.)

General Health Issues

Minor Ailments (no treatment required/given)

Eyes: 4 cases, mostly minor weeping of the eyes. One case involved an eye that became infected, possible from a foreign object intrusion. Even this more serious case self-resolved within a week.

Feet and Legs: No cases reported

Skin: 3 cases. One involved munge/dermatopholis, one had mites between their toes, the last had hair loss on the snout from a seasonal grass allergy.

Rye Grass Staggers: Exact numbers were not provided, but there were reports of both cria and adult suffering from RGS, but all came right without treatment as peak season passed.

Other: One owner remarked on the appearance of mucus in the feces.

Minor Ailments (treated by owner)

Eyes: 3 cases. One was a weepy eye treated with tea bags. The second was conjunctivitis treated with vet-provided ointment. The third involved a periorbital infection with associated hair loss, which was treated with antibiotic cream. All three treatments successful.

Feet and Legs: 1 case of toe infections (probably fungal). Treated with iodine spray, but the infection reoccurred when the animal was put back into a wet / boggy paddock.

Skin: ~30 cases. Problems included mange, mites, fungal infections, skin infections, and wrinkled/scaly skin on neck or legs. Treatments included Dectomax, Frontline, Antibiotics, Iodine spray, and Simple Green washes. Most but not all treatments were successful. Often it took multiple treatments and weeks or months of care to clear the problem.

Rye Grass Staggers: ~15 cases. Mostly treated with VitB, hard-feeding, or otherwise moving off the Rye Grass containing pasture. In some cases the RGS onset was sudden and unexpected when a sold animal was moved onto new pasture.
Other: 3 cases. One involved rye grass seeds in the ear. Another involved a mandibular (jaw) abscess. The last was a case of Polioencephalomalacia (PEM, Thiamine deficiency) in a young Suri cria who presented with fits. Injectable VitB1 and time resolved the issue.

**Moderate Ailments (treated by vet)**

Rickets: 3 cases. One in a 3-month old cria. Two cases in older animals that were purchased showing symptoms of rickets and angular limb deformities. All resolved with VitD therapy.

Stomach Ulcers: One suspected case, which the owner described as “still monitoring”.

Colic: 2 Cases. One was an animal in pain (screaming) but with normal urination and excretion, that had self-resolved 6 hours later when the vet arrived. The other was an animal that suffered periodic bouts of colic when pregnant.

Facial Eczema: 1 ongoing case.

Poisoning: None

Adverse Reactions to Medications: None

Other Issues: 4 Cases. The first was a slow-growing cria that vomited frequently. No diagnosis available at time of survey. The second case involved the import of multiply-drug-resistant parasites onto their farm with the arrival of a new animal, and the significant problems it caused from a health and management perspective. The last two cases were a pair of alpacas that gained access to a feed shed and consumed ~25 kg of alpaca pellets. Both animals died within 48 hours despite active veterinary intervention.

**Routine Animals Maintenance**

Measures the number of respondents (out of 30) who drench, vaccinate, body score, etc.

<table>
<thead>
<tr>
<th></th>
<th>Drench (wormer)</th>
<th>Vaccination</th>
<th>Vitamin D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Once a year</td>
<td>3</td>
<td>14</td>
<td>5</td>
</tr>
<tr>
<td>Twice a year</td>
<td>7</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Quarterly</td>
<td>2</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>As Required</td>
<td>10</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>(Winter Only)</td>
<td></td>
<td></td>
<td>7</td>
</tr>
</tbody>
</table>

**Routine Animal Checks and Measures**

<table>
<thead>
<tr>
<th></th>
<th>Body Score Adults</th>
<th>Body Score Cria</th>
<th>Weigh Adults</th>
<th>Weight Cria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>0</td>
<td>0</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>Once a year</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Twice a year</td>
<td>4</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quarterly</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Monthly</td>
<td>5</td>
<td>6</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Weekly</td>
<td></td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
Notes on Dosage:
Drench: Recommendations for Dectomax, the most commonly used drench among survey participants, are typically in the 1 ml per 25 kg weight to 1 ml per 33 kg weight. For drenches in the macrocyclic lactone family (dectomax, genesis, ivomec, etc) some veterinarians are now increasing the recommended dose. Where before 1.5x the sheep dose was considered, now 2x the sheep dose is the recommendation. (As always – when in doubt, talk to your vet.) Many users of Dectomax reported giving 2ml doses. That might be adequate for yearlings and small adults, but is unlikely to be sufficient for larger females and many males. Especially given the high BCS (and thus increased body weights) on NZ farms. Dose rates of 3 ml would be needed for a 75 kg animal, and for very large and very fat animals (which can easily hit 90 or 100 kg) then a 4ml dose would be required.

Vaccine: The sheep dose appears to be fully sufficient for alpaca. Reported deaths from clostridial disease are very rare in camelids, and in all but one case those have been young animals that might not have been fully or properly vaccinated.

Vitamin D: Some owners reported giving very high doses of Hideject to their alpacas, up to 2 ml. For a 75 kg alpaca this would be a dose of 13,000 IU/kg, enough to potentially cause ill-health and clinical illness. A 2ml dose in a cria or tui (or any small alpaca) could be quite dangerous. Why veterinary dose recommendations vary, they are usually in the range of 1,000 to 2,000 IU/kg. If using Hideject a dose of one-quarter ml would deliver a dose of 2,200 IU/kg for a 75 kg adult.

Reported average Body Condition Scores for adult animals:
Other Practices & Issues:

Facial Eczema Plans: 11 farm reported having plans for FE management. These were largely located in the northern, more high-risk areas.

Fecal Egg Counting: Few farms performed regular FEC. Those that did use FEC mostly did so on an ad-hoc basis in response to change in fecal consistency, or as a means to investigate loss of body condition. Two people did their own counts (one using a centrifuge), eight more submitted samples to professional laboratories.

Shearing: Most people reported relying on professional shearing crews (15), while five used the shearing services of neighboring alpaca owners. Only two did their own shearing. There were some very minor injuries (13) which required no treatment, and a few (7) minor injuries that were easily treated on scene. No major shearing incidents were reported. There were some comments about the surprising appearance of sebaceous cysts, and the common use of superglue to deal with minor lacerations.

Quarantine: Five people reported having some form of quarantine system (usually isolation for 1 to 2 weeks after being drenched). Many people stated that because they do not have new animals arriving on farm, quarantine is not necessary. One person commented about how they did not have quarantine practices previously, but now do after a visiting animal brought *Haemonchus contortus* onto the property.

Off-farm animal movements: About 35 animals (~5% of the population) were taken off farm during the survey period. The major of these trips were for alpaca-show visits. A few were for stud services and other mating activities. And one farm took their animals off farm for the purposes of parades and SPCA street appeals.

Chronic Wasting: Ten animals suffered from chronic wasting, of which at least five died. Two of the deaths were explained (heart defect and copper poisoning), the others were not diagnosed. Two of the animals were older (9 and 13 years), and one was described as “very elderly”.

Cria Births

Assisted Births
Dystocia- wrong position (4.7% of live births)
2 with head back, pulled by owner successfully.
1 with 1-leg back, pulled from maiden by vet successfully
1 with both front legs back, pulled by owner successfully
2 with the positional problem not specified, where both the cria died
1 with no information but that the dam died.

Dystocia- cria too large and stuck (6.8% of live births, most of which came from one farm)
10 reported cases. At least 4 of which were from maidens. Nine were successful, but one resulted in cria death after the umbilicus ruptured on the pelvic wall and the cria lost too much blood before they could be extracted and the bleed controlled/clamped.

One farm reported “a year of giants” where almost all the cria that year were huge, up to 13 kg (and multiple births over 12 kg). There was one fatality involving a 10.6 kg cria from a small (55 kg empty) maiden mother, the dam survived (as detailed above in the too-large dystocias).

Other Birthing Issues.
There was only one full-term-stillborn reported, and no premature stillbirths. Two cria needed supplemental feeding due to inadequate milk from their dams, and three cria were rejected (though one was eventually accepted by its first-time mother). No twin births or twin stillbirths were reported.

One cria had a herniated umbilicus which was successfully treated by application of a plastic disc over the hernia to hold it in place until the abdominal wall sealed over. Two cria were born with ligament issues that required splints/bandages, and both came right within a few weeks.

Deaths
Twenty Five alpacas (3.6% of the population) died during the survey period.

-4 day old, January. 4 Weeks premature.
-4 day old female. April. Found dead, no symptoms. Easy birth, good mother, no signs, just suddenly dead. Cause could not be determined
-7 month old female. October. Found dead by neighbors. Had rickets when younger, but recovered. No indication prior to death, no PM.
-8 month old male, July (early AM). Slipped and fell on steep hill during severe weather, broke its neck.
-8 month old male, August. Wasted away, multiple organ failure. Probably acute copper toxicosis.
-2 year old male, July. Found dead, had been dead a few days before discovery. Had slipped in gully and gotten trapped on side. No PM.
-2.5 year old male, June. Had breathing difficulties prior to death. Cause was heart attack from endocarditis.
-3.5 year old male, August. Some health issues 2 months previous, but thought to have recovered. No idea as to cause.
-6 year old female, July, Got into alpaca nuts and ate a 25 kg bag worth. Vet tied everything. Died ~48 hours later. Toxic shock.
-6 year old female, found dead, no apparent reason
-7 year old female, June. Found on side caught in fence. Asphyxiation. Unclear how she managed to get herself stuck.
- 7 year old female, February. Slipped on steep hill, ended up with a vine wrapped around neck and hanged herself.
- 7 year old female, June. Found dead. No previous signs, no PM.
- 8 year old female, January. Loss of body score, lots of treatments applied, none successfully. Went downhill quickly, cause unknown.
- 8 year old wether. Euthanized January. Crusted face never healing, general health decline. Obviously suffering. Had been ongoing condition that never really responded to the many treatments applied.
- 9 year old male. January Declining condition despite good feed and good teeth. Suspect neoplasia.
- 9 year old female, November. Found dead in paddock, no symptoms. Did suffer from permanent ryegrass staggers.
- 10 year old female. Died 4 days post c-section, despite surgery going well. Was very weak post surgery.
- 13 year old male, January. Died suddenly, no idea as to cause.
- 13 year old male. Anaemia from *Haemonchus contortus* parasitism.
- 13 year old wether. Went downhill quickly through the day, no defecation/urination. Unable to stand by 6pm. Drooling by 10PM. Dead by 4 AM. Owner suspects twisted gut. Vet could not attend until the following day, 12 hours after death. No PM.
- 13 year old female, October. Had been very skinning for 4 months, lots of supplemental feed. Owner thought she was through winter and finally recovering, and she died two days later. No PM.
- 15 year old female with cria at foot, June. Had been in a very stroppy mood the day before, spitting away her own cria. Restless. Found dead the next morning. No PM.
- 24 year old female, May. Anaemia, failing immune system, general system shutdown. No PM.