

Let's get technical

by Phil Stewart, *Deer Industry News* Editor

In a departure from previous years, day two of the conference was a Saturday morning-only session, with the first segment, sponsored by Alliance Group, devoted to technical updates. These included reports from the Advance Party Conference held in the capital two days earlier.

Advance Party reports

Mackenzie group using farm data

Pania Flint, who coordinates the 25 (and rising) Advance Parties, is also a facilitator, looking after groups in her Central Regions patch, as well as the Mackenzie Advance Party.

Reporting on the latter group, she said the Mackenzie farmers were focusing on “realising potential” in what could be a challenging environment. Flint is a great proponent of using farm data and members of this group have been reaping the rewards.

For example, deer are part of an integrated system at Hamish and Julia Mackenzie's Braemar Station at Lake Tekapo. Flint said the Mackenzies had re-evaluated the contribution of the deer to the business and concluded they needed more input, with the result that the deer are now pulling their weight along with the sheep and cattle.

The Mackenzie group has a range of production systems, but all have been focusing on specific areas like genetics, feeding, weaning, weighing, feeding R2 hinds and body condition scoring (BCS). Flint said the group devoted a whole day to BCS and are now all competent to score their animals.

She said getting members of the group to consistently record has been part of the group's success, but it needs to be farmer centred. She said it has helped them see what the deer contribute to their business. “Farmers are hungry for knowledge and they want to look deeper into their own performance.”

Flint is doing a Kellogg Rural Leadership course and is focusing her project on performance recording. She said having the right tools and the right attitudes are the secret to effective use of farm data.

The group is now four years old and looking ahead for new challenges. They are not short of ideas – one has been in-depth cost benefit studies on different strategies. One such project has been at Clayton Station, where the Orbells have been looking into improving feed quality on their hill block (see *Deer Industry News*, April/May 2017, page 19).

Leptospirosis vaccine cost-benefit trial

Jim Cameron is a member of the Southland Elk/Wapiti Advance Party. He told the conference about a small on-farm leptospirosis vaccination trial at Connemara, near Manapouri, a farm he manages for Murray Hagen. Connemara is a 330 hectare breeding, finishing and velvet wapiti stud with 870 cows (including 100 R2s), 360 bulls (including sires) and 1,000 weaners (including bought-in animals).

Cameron said they get good growth rates but reproductive

performance wasn't good in the first and second calvers, even after years of taking out the wet/dries. They'd been doing everything right, getting one condition score on the cows in the lead-up to mating and giving them an autumn drench.

“Getting them pregnant wasn't a problem – but the calves just weren't there at weaning. The percentages were still in the mid-to-low 80s.”

Leptospirosis was highlighted as a possible cause of the poor performance. Other members of the Advance Party had got good results from vaccinating against the disease and Massey studies had shown benefits in terms of reproductive performance and weight gains.

The project at Connemara involved vaccinating half of a mob of 170 R2 and R3 cows against leptospirosis, with all managed in the same conditions. The results were quite compelling in both reproductive and weight terms (Table 1).

Table 1: Results of leptospirosis vaccination trial in R2 and R3 cows

	Weaning percentage	Weaning weights of offspring
Vaccinated group	93%	76kg
Unvaccinated group	87%	72kg

Cameron said the 6 percent increase in weaning percentage and 4kg weaning weight advantage yielded a net (of labour and vaccine costs) benefit of \$3,670 per 85 cows (about \$43 a head). “There was virtually no tail end with the vaccinated ones,” he said.

He said an added and uncosted benefit was the better protection for human health, when the livestock are immunised against the disease and don't shed the disease organism nearly as much as when unvaccinated. Another benefit was the reduced amount of culling needed.

Hill country cropping at Te Mara Farms

Hamish Clarke, from the Waipa Advance Party, described an aerial cropping and regrassing project in hill country. He'd seen the technique work in the lower North Island and wanted to give it a go, despite the risks of it not working.

Clarke said he wanted to make a gorse-infested 6-hectare hill block that was “useless” in winter more productive while controlling weeds and unpalatable native species.

The programme started in July/August with an (unsuccessful) attempt to get mixed age hinds to clean up the thatch left behind by heifers. The first spray, to kill unpalatable pasture species with 6 litres/ha of glyphosate was in mid-October. A second spray at 3 litres/ha in early November targeted the weed seed bank.



Chicory established following helicopter seeding.



Pasja crop applied by helicopter.

Summer crop seeding followed straight after, with one paddock sown in chicory (22kg/ha) and another in Hunter Pasja (12kg/ha), with DAP, SerpS and boron applied at the same time, along with slug bait.

Yearling hinds were set stocked on the Pasja 3–4 weeks after planting and taken off in April. Spikers got three grazings off the chicory, with two further grazings given to mixed age hinds.

The chicory was sprayed in March for broadleaf weed control and the Pasja sprayed out completely. This was followed by Italian ryegrass at 35kg/ha.

Clarke said he learnt plenty from the exercise, including the importance of getting the wind conditions right when dropping seed (some had ended up in the wrong paddock after the wind got up). He said coated or heavier seeds would help with more accurate placement. Another issue was the presence of a thick residual thatch, which lowers germination rates, although it probably does protect the soil.

He said slug bait was a worthwhile investment and cheaper than reseeding. Rain coming at the right time helped with germination when seeding uncultivated soils, he added. Multiple germinations were observed during the exercise, so some patience was needed.

Clarke was sufficiently encouraged by the experience to continue using the technique, planning a two-year cycle with four sprays between old and new pasture, as follows:

1. Spray out weeds and unwanted pasture species
2. Pure Pasja in first spring for yearling hinds.
3. Pure sward of annual grass in autumn for weaners.
4. Pure chicory for spikers in second spring.
5. Add Italian ryegrass to chicory in second autumn (possibly to last into a third or fourth year).
6. Create permanent pasture the following spring.

He said the chicory application cost was \$1,342/ha and the Pasja was \$1,080. A saving of \$200/ha was possible by running crops back to back.

“The hard part has been getting it out of crop and into winter grass,” Clarke said. “We left it a bit late this year.”

He was conscious that “spray and pray” had been getting some bad press, but was confident the system could be managed well.

“We don’t use cattle on it and we don’t break feed.”

Well managed, the technique had potential to make the deer industry more productive, he said. Clarke thanked the Waipa Advance Party and the late Brian Wellington for their help and advice.

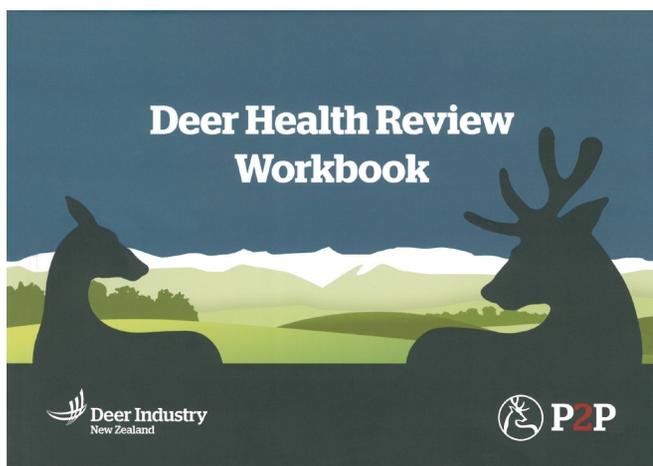
Regional workshops strike a chord

Grant Charteris, a member of the “Hawke’s Bay Originals” Advance Party, updated the conference on P2P Regional Workshops. The first of these was held in Hawke’s Bay last August and several more have been held since (see separate reports in this issue).

Charteris said the workshops focused on specific topics. “It’s always good to read about these subjects but it’s powerful to see it in person at your neighbour’s place.” The Hawke’s Bay workshop looked at winter crops at two farms, Jedburgh and Maranoa, focusing on crop yields and pros and cons of break feeding versus ad lib.

Charteris said having experts on hand such as PGG Wrightson’s Hamish Best, as well as Jason Archer and Geoff Asher was a real bonus.

“The workshops are a great way to stimulate farmer-to-farmer discussion and to share lessons with the wider community.”



Deer health reviews taking shape

Lorna Humm, DINZ Deer Health Project Manager, explained Deer Health Reviews, a process for identifying production gaps that could be caused by health issues, assessing health risks at farm level and making a plan to manage these health barriers to higher profitability and continuous improvement.

She has developed a workbook that farmers can go through with their veterinarian so they can develop a plan that targets

animal health spending in the right places. The document is to be available in hard copy but will be most valuable in its electronic format, linking to other P2P productivity tools such as the KPI charts and growth curves for replacement hinds and venison production.

Humm said the review process had been trialled on several farms and has been refined as a result. Farmers liked going through the review because it identified risks unique to their property and farm system, providing a range of options for managing these. Some commented that the reviews were useful for staff training and had been a real “eye opener” for the health status of their own herds. Others have commented that having a physical record of the decisions made is better than just having a calendar.

Regular measuring and monitoring was essential to get the most value from the process, Humm said.

It was also a great way for veterinarians to get a better appreciation of how their clients’ businesses worked, while providing farmers better value for the money they spent on animal health advice. “This kind of health planning is about ensuring the bases are covered for health conditions that can, and do, limit productivity. It’s about what you *don’t* need to do as much as what you do,” Humm said.

Phil Skinner, veterinarian for Orari Station, managed by Lindsay Paton, said the reviews gave an opportunity to assess the risks of action versus non-action around a particular issue and also what improvements could be made through additional management changes.

He said it was worthwhile taking a couple of hours for vet and farmer to work through the document and arrive at a plan together.

Humm said the Deer Health Review Workbook should be available from the end of June and is confident that “good stories of both improvements and cost-savings” will continue to come out as more farmers and their vets go through the process. She is exploring opportunities to extend the capability of the electronic form to be able to link with other farm management systems like FarmIQ, but “this process will be available for all deer farmers, in the way that suits them best, no matter where they sit on the scale of size or technology”.



Lorna Humm.