Deer health planning: for welfare and profit

Why is health planning so important?

Proactive vs reactive

Well-fed, healthy, unstressed deer are profitable deer. A deer health plan will help reinforce these three pillars of profitable deer farm management.

Sure, issues will arise that require a reactive response, that’s farming. But the plan can then be amended to reduce the risk of an issue recurring or to reduce its impact if it does.

Providing for the needs of deer

A maxim of deer health planning is to ‘provide everything deer need and nothing that they don’t’.

Good deer health is critical from both a welfare and profitability point of view. For this reason, most farmers spend a significant sum on animal health products.

• Is your deer health spend well-targeted?
• Could it be reduced?
• Would a targeted increase in some areas be rewarded by improved deer welfare and farm profitability?

Your deer health plan will answer these questions, with a cost-benefit analysis of the options.

In annual or more frequent reviews of the plan, deer health risks need to be reassessed and if necessary, the plan revised.

Nutrition is intertwined with animal health in any livestock farming system. Well-fed deer are less prone to disease, less stressed and more productive. The liveweights of young deer at key dates (weaning, 1 June, 1 September etc) and hind body condition score records are a window into how well your deer are being fed. This data will be reviewed as part of the planning session.

Meeting the expectations of markets

Venison companies now encourage their farmer suppliers to comply with their on-farm quality assurance (QA) programmes.

This is because customers and buyers of our deer products want to know that our deer have been raised with respect for their welfare, food safety and the environment.

Having a documented deer health plan that is reviewed each year is now a key element of all the company on-farm QA programmes. A plan is required for the supply of Cervena.

Left: Well-fed, healthy, unstressed deer are profitable deer. A deer health plan will help reinforce these three pillars of profitable deer farm management.

Key points

• A written deer health plan is a vital farm management tool. It reassures farmers that they are actively managing threats to deer health and welfare on their farm.
• A sound plan should increase long-term farm profit. It should also protect and enhance deer welfare and health, as well as the health of those who manage them.
• Farmers need a health plan to comply with venison company on-farm QA programmes.
• The plan will be based on a full review of a farm’s production data. This will identify strengths, weaknesses and opportunities for making improvements.
• Your vet or deer health adviser can work with you to create a plan that is specific to your farm.
• Measuring and monitoring are a big part of health planning. This helps ensure your spending on deer health is justified by improved deer welfare and increased profitability.
• Health plans are living documents, which evolve over time. Review them annually. Quick quarterly updates can help keep them on track.
**Biosecurity**

Your deer health plan will help you to minimise the biosecurity risks to your farm and its livestock. These include animal diseases that are established in New Zealand, like Johnes and bovine Tb, as well as exotic diseases.

Staff need to be encouraged to look for – and report – any unusual deer behaviour. They also need to understand that farm biosecurity is at heightened risk when bringing in animals from other properties. How to manage new stock, to reduce the risk of them bringing unwanted diseases onto your farm, will be part of your deer health plan.

It is also important that everyone working with deer, or visiting a deer farm, understands the risks posed by the two main exotic disease threats – chronic wasting disease and foot and mouth. The *Deer Fact*, ‘Exotic diseases’, is a great training tool.

**Health and safety**

Your deer health plan will help you minimise the human health and safety risks associated with handling deer.

Among these risks are diseases carried by deer that can be transmitted to humans (zoonoses). Probably the worst of these is leptospirosis. There are also related risks such as needle-stick injuries.

It is the legal responsibility of everyone in the workplace, especially those in charge, to take all practical steps to ensure occupational safety.

**BEST PRACTICE HEALTH PLANNING**

The deer health planning process

1. Book your vet/deer health adviser
2. Collect and prepare farm data
3. Provide the data to the vet before the meeting
4. Set aside at least 3 hours for the meeting
5. The vet/deer health adviser drafts the plan
6. Check, refine, then finalise the plan
7. Put the plan into action
8. Review the plan once a year (at least)

**Production performance review**

Steps 1-3 above

Book your vet/health adviser at least two weeks in advance. This gives you plenty of time to collect and prepare production data for the meeting. You won’t waste valuable meeting time looking for figures.

Send this information to the vet/health adviser before the meeting so they come prepared.

**Why is production data so important?**

Data tells a story. By comparing actual production with what you think you could achieve you can identify issues that may be having an impact on welfare and productivity. Because every farm is different, having access to actual production figures will assist your vet/health adviser to

**Data checklist**

This data will be useful when creating a deer health plan tailored to your farm. Not all farms will have all this information but, in general, the more data the better the plan.

- Stock tallies (noting any major changes in stocking policies)
- Key farm dates or time frames (mating, weaning, scanning, set stocking etc)
- Young stock weights
  - Weaning weight (or 1 March weight, or 100 day weight)
  - 1 June weight
  - 1 September weight
  - Replacement hind weights
- Mature hind weight (1 June weight)
- Growth rates (ideally broken down into key periods)
  - Pre-weaning
  - Autumn
  - Winter
  - Spring
- Scanning results
- Condition scoring results
- Death records
- Kill sheets if applicable, including carcass weight trends
- Veterinary reports (trace elements, faecal egg counts, post-mortems)
- DeerPro report re Johnes’s disease status and venison production data
- Velvet production data

Production figures are vital – they are a window into the farm’s productivity and how deer health and profits can be improved.
provide advice on how to prevent and mitigate losses that is tailored to your deer on your farm.

**Risk assessment and disease management review**  
Steps 4 & 5 left  
Risk assessment is the 'engine room' of the health planning meeting. It involves looking at risks to deer health and profitability. It identifies key areas for action and prioritises them.

Often it is unclear whether a particular disease or condition is having an impact on productivity. To clarify this and to ensure that the farm's deer health spend is well-targeted, lab testing is often required. Testing is also useful when questioning if current treatments or preventative actions are working.

Once testing has confirmed that an issue needs to be managed, you can do a cost-benefit analysis of the various treatment and management options with your vet/health adviser.

These options will include the use of integrated management practices that promote good deer health and welfare. These may include grazing with other farm animal species to help manage parasitism, providing better seasonal nutrition, using genetics to breed resilience and reducing the farm's reliance on chemical inputs.

**Actions: plan, do, review**  
Steps 6-8 left  
Each vet/health adviser has their own format for their reports and plans. But in every case they will be tailored to

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**Case study**

**Nutting out ways to make gains from better deer health**

Deer health planning is by no means a new concept on The Kowhais, a high performing South Canterbury farm.

However, Tim Turner the farm's operations manager and vet Hayden Barker say the DINZ deer health review process is time very well spent. Their first review, in 2018, was undertaken to ‘nut out where we can maximise deer health to make some gain,' Turner says.

Having all the production data on hand took a fair bit of preparation on Turner's part, but it was well worth it.

“We had all the relevant data in various folders, but it was a good process to get everything down and show how the farm is doing in a simple way. In some areas I thought we'd been doing better, so it showed me where there was room for improvement,” Turner says.

“The process prompted further investigation and this highlighted opportunities very quickly.”

He says the risk assessment and disease management review helped identify priority issues. “We looked at the cost-benefits of what we were doing compared to other options and decided on a plan of action. We then decided on actions, dates and responsibilities.

“This ensures we things get done. They are also the basis for our discussions whenever we revisit the plan.”

Barker said the review took time initially, but it is now the foundation for ongoing plans. It’s a base document for the farming operation.

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**Deer welfare comes first**

Ensuring the welfare needs of deer are being met is a must. Everyone who farms or works with deer should be familiar with the 2018 Code of Welfare for Deer.

If you are responsible for staff, make sure they are trained to recognise ill health in deer and know how affected animals should be handled and treated.
the needs of the individual farm. You can expect to receive:

- **A report** – detailing discussions and decisions made
- **Calendar** – a wall planner, electronic calendar or both. There are a range of these available, including tools that give text reminders and can be updated on-line. Ask your vet/health adviser what options are available

**Workbook makes the job easier**

The Deer Health Review Workbook is a very useful tool for deer health planning. It was developed by DINZ under the P2P programme. Download a copy from: www.deernz.org/deer-health-review

Or email info@deernz.org or phone 04 473 4500 and ask for a hard copy.

- **Action plans** – detailing actions, dates and responsibilities. These can help keep deer managers on-task and form a great basis for future plan reviews.

**When?**

There is no perfect time for health planning meetings. Choose a time that works for you and your vet/health adviser.

Annual revision is a must. Make a point of booking the next review at the end of each session. Brief quarterly catch-ups can help keep plans on track.

Key periods to review progress and check future tasks are:

- **Winter**: How did summer and autumn go? Are there test results to be viewed? Revise plans for spring, set-stocking and lactation.

- **Summer**: How did spring go? Review plans for summer/early autumn, including fawn management, feeding during lactation, weaning and mating. Look ahead to maximising autumn growth rates; winter management and feed requirements.

Because every farm is different, it is important for your vet/animal health adviser to have access to your actual production figures. You will then be provided with a deer health plan that is tailored to the needs of your deer on your farm.

This Deer Fact was produced by Deer Industry New Zealand (DINZ) as part of the Passion2Profit (P2P) strategy. P2P is a Primary Growth Partnership joint venture between DINZ and the Ministry for Primary Industries.

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