

RCD – Rabbit Calicivirus Disease

This task is about impact of a virus on the food chain of a rabbit.

This rabbit-killing virus was introduced to New Zealand in the winter of 1997. It was brought into New Zealand to control rabbits in the South Island. One way the virus has been spread is by the use of virus-infected carrots.

Some notes on rabbits and the virus:

- Rabbits up to 8 weeks old do not die from the disease even if they get infected.
- The best time of year to release the virus is in autumn, but mid-to-late spring and summer are also good times.
- Rabbits are estimated to cost the country \$50 million in lost agriculture and \$25 million in rabbit control, e.g., hunting and poisoning.
- The virus can spread from rabbit to rabbit, and in Australia insects play a big part (especially in the warmer areas of the country) in spreading the disease.
- A doe (female rabbit) can produce 8 litters a year each with 6 young.
- Ferrets, stoats, and wild cats kill and eat rabbits.
- Australian rabbits are more likely to live in warrens (a large hole with other rabbits).

a) Why might the disease **not** spread as easily in the South Island as it did in Australia?

b) What is **one** reason why it might be best to spread the virus in autumn?

c) Here is a food chain with the rabbit as a link in it, use it to help answer parts i) and ii).

Grass → Rabbit → Stoat

i) Explain why farmers regard the rabbit as a pest.

ii) One of the possible reasons the Department of Conservation did not want the virus introduced was because of the likely effects on our native birds. What do they fear might happen?

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