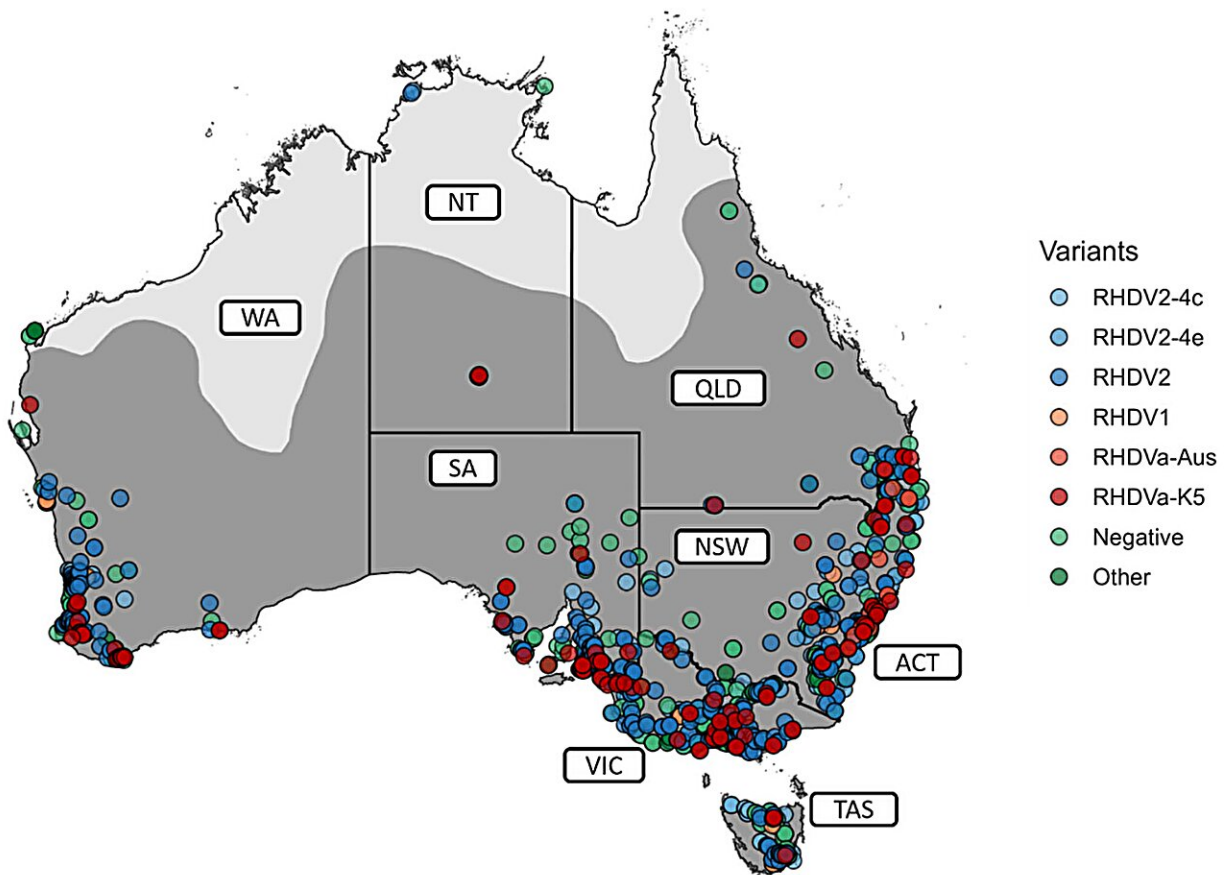


Australian citizen scientists hop to it with rabbit virus tracking project

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Geographical distribution of rabbit population and lagovirus-positive samples from January 2015 to December 2022 in Australia. Rabbit population distribution was determined from a previous study and is depicted as a dark gray area in the map [61]. Colors refer to the respective variants detected. “Other” refers to samples that tested negative for RHDV but positive for myxomavirus, *Pasteurella multocida*, or *Eimeria* spp. NSW—New South Wales, VIC—Victoria, QLD—Queensland, NT—Northern Territory, WA—Western

Australia, SA—South Australia, ACT—Australian Capital Territory, TAS—Tasmania. Credit: *Viruses* (2023). DOI: 10.3390/v15122348

Australia's national science agency, CSIRO, is calling on rural and regional Australians to join in the longest-running citizen science survey of rabbit diseases in the world, to help keep the invasive pest in check.

Feral rabbits are one of the most destructive invasive pest species in Australia. They compete with [native animals](#), cause plant biodiversity loss, reduce [crop yields](#) and cost the [agricultural industry](#) around \$239 million per year.

Rabbit hemorrhagic disease virus (RHDV), also known as rabbit calicivirus or lagovirus, is used as a biocontrol agent to manage rabbit populations at the landscape scale in Australia. It only affects rabbits and hares, and vaccination is available for domestic (pet) rabbits.

New research shows the success of the nine-year disease monitoring program, which relies on members of the public taking tissue samples from dead rabbits found in their area using free sample kits provided by CSIRO. The paper is [published](#) in the journal *Viruses*.

Samples can be taken from deceased wild or domestic rabbits. CSIRO scientist Dr. Maria Jenckel said the samples provided since 2015 have helped paint a better picture of the viruses circulating in wild rabbit populations.

"We encourage [community members](#) from across Australia, particularly in rural and regional areas, to contribute samples for testing so we can get the widest possible coverage across Australia," Dr. Jenckel said.

"Citizen science has expanded rabbit virus tracking from fewer than 30

samples tested annually to an average of 345 samples tested annually from 2015. The program allows researchers to track the prevalence of rabbit virus RHDV, with samples arriving every week."

CSIRO virologist Dr. Nias Peng said the huge increase in citizen collected samples has allowed scientists to work on a much wider geographic spread as researchers don't need to collect the specimens directly.

"A [citizen science project](#) such as this contributes directly to research on rabbit biocontrol, which has long term benefits for Australia's biosecurity, native species conservation and ecosystem health," Dr. Peng said. "It is therefore critical to sustain such programs for the long term to monitor for emergence of new RHDV incursions and/or recombinant variants which may affect wild and domestic [rabbit](#) populations."

More information: Nias Y. G. Peng et al, Utilizing Molecular Epidemiology and Citizen Science for the Surveillance of Lagoviruses in Australia, *Viruses* (2023). [DOI: 10.3390/v15122348](https://doi.org/10.3390/v15122348)

To request a free test kit, email the research team at rabbitcalicivirus@csiro.au with your postal address.

Provided by CSIRO

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