Prue Henschke, viticulturist at Henschke Cellars said this initiative is an exciting new tool for protecting vineyard health and ensuring vine longevity.

Virtual fence to protect SA's wine industry

A CUTTING-EDGE vineyard monitoring system, designed to keep South Australia's $1.78 billion wine industry free of devastating pests and diseases such as phylloxera, was launched recently.

Funded by the SA Government and Vinehealth Australia, Project Boundary Rider creates a virtual boundary – or geofence – around vineyards and uses smartphone app technology to monitor the movement of people entering vineyards.

Inca Pearce, Vinehealth Australia CEO, said the geofencing technology will enable growers to better integrate an important farm gate hygiene practice of recording visitor movements into daily operations.

"It means growers can remotely record the arrival and departure of visitors as part of their day-to-day management, which is essential in preventing damaging pest and disease incursions in our vineyards," she said.

Growers receive an immediate notification when someone has entered a vineyard, while visitors with the Boundary Rider app are greeted on their smartphone with a welcome or instructional message.

Information from app users is uploaded to create an electronic log book accessible to the owner of the vineyard. In the event of a pest or disease outbreak, the technology provides instant data to enable a rapid response to contain the spread and minimise loss.

The instant alerts for vineyard owners, when anyone crosses their property line, could be critical in preventing the spread of pests such as phylloxera – which can be spread by machinery or even on shoes and clothing worn by people who have travelled between infected and non-infected areas.

The Boundary Rider pilot project, initiated by Vinehealth Australia, will be rolled out across 30 of the state's winegrowing properties throughout McLaren Vale and the Barossa.

The pilot, which runs until mid-2017, has attracted strong support from winegrowers. Businesses taking part include Chapel Hill Winery, Charles Melton Wines, D'Arenberg, Dorrien Winemaking, Gemtree Wines, Henschke Cellars, Noon Winery, Scholz Estate, St Hallett Wines, Torbreck Vintners, Wirra Vineyards and Wright Vineyard Trust.

"We view this ground breaking project with much anticipation and excitement because the health of our vines is paramount and we are always looking for new and improved ways of ensuring their longevity," said Prue Henschke, viticulturist at Henschke Cellars'.

Melissa Brown, Gemtree Wines' viticulturist, has also been keen to be part of the initiative.

"Being certified organic and biodynamic, as well as owning a number of different vineyards, means having an effective monitoring system is a really important tool for managing security and protecting our precious resource," Brown said.

Safeguarding the privacy of users is an important feature of the Boundary Rider app. The technology does not track people inside or outside the geofence boundary, and property owners can only access records of visitors crossing geofences on their own properties.

The identity of individual visitors and vineyards can only be used in an emergency outbreak and is only accessible by system administrators at Vinehealth Australia.

Leon Bignell, SA Agriculture, Food and Fisheries Minister, said the innovative system was a first in biosecurity for the Australian grape and wine community.

"It will protect vineyards from pest and disease threats and provide critical intelligence about the movement of people coming in and out of properties," Bignell said.

"Wine is one of South Australia's key export industries and we grow about 50 per cent of Australia's grapes. It's vital we do everything we can to protect the industry's future and South Australia's reputation as the producer of premium food and wine from our clean environment.

"Historically we have an enviable reputation globally for the strength of our biosecurity systems and Project Boundary Rider will take it to another level."

The pilot is being supported by the McLaren Vale Grape, Wine and Tourism Association and Barossa Grape and Wine Association.

For more information go to www.vinehealth.com.au/projects/project-boundary-rider/.