

Virtual fence protects wine industry

A cutting-edge vineyard cyber monitoring system, designed to keep South Australia's wine industry free of devastating pests and diseases such as phylloxera, is being piloted.

Funded by PIRSA and Vinehealth Australia, Project Boundary Rider creates a virtual boundary – or geofence – around vineyards and allows users to monitor the movement of people entering vineyards through a smartphone app.

Pests such as phylloxera can be spread by machinery or on shoes and clothing worn by people travelling between infected and non-infected areas. The app notifies vineyard owners when anyone crosses their property line.

So far, the app has tracked around 9,000 boundary crosses since its launch in late December.

Agriculture, Food and Fisheries Minister Leon Bignell said the innovative system was a first in biosecurity for the wine sector nationally.

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

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

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



Vinehealth Australia CEO Inca Pearce with Henschke Cellars' viticulturist Prue Henschke

"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.

The app sees growers receive an immediate notification when someone has entered a vineyard, while visitors with the app on their smartphone are greeted 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.

Vinehealth Australia Technical Manager Suzanne McLoughlin said boundary crosses were monitored until the end of vintage.

"We will meet with our two pilot grower groups to run simulation exercises to validate the capability of our trial software system for track and trace purposes in the event of an incursion," Ms McLoughlin said.

"With the help of the growers in the pilot study, we are developing a list of fundamental attributes for a biosecurity geofencing system and value proposition for all potential users, should we wish to pursue this capability on a broader scale in the future.

"And we think this technology has merit beyond the wine industry. We have had interest from several other industries in our geofencing project and we've been able to share with them our learnings to date and potential suitability for other situations."

The pilot runs until mid-2017 and is being supported by the McLaren Vale Grape, Wine and Tourism Association and Barossa Grape and Wine Association.

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