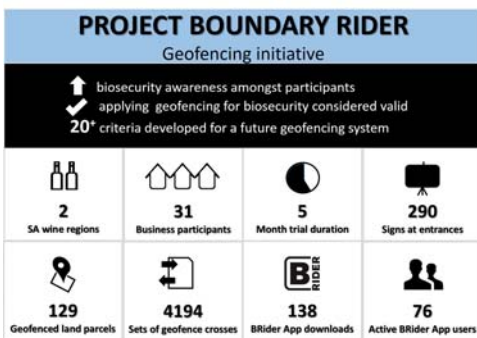


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Vinehealth pilots new biosecurity tool

A Vinehealth Australia pilot project, which saw virtual fences built around vineyards in the Barossa and McLaren Vale regions to track boundary crossings, has demonstrated the power of geofencing as a biosecurity tool.

Project Boundary Rider is the first known of its kind to assess the value proposition of geofencing technology for biosecurity for the Australian wine industry, which contributes \$40.2 billion in gross output annually.



“Geofencing is powerful – knowing who has been in vineyards and when could help us respond to pest and disease incidents and prevent further spread,” Vinehealth Australia CEO Inca Pearce said.

The Boundary Rider pilot project was undertaken with 31 businesses across the Barossa and McLaren Vale wine regions, with geofences active over a five-month period. A Canadian technology company, Be Seen Be Safe, provided the geofencing software for the trial, which was adapted from the poultry industry.

Virtual fences were created around 129 separate land parcels. GPS technology was used to detect the movement of each person carrying a smartphone with Location Services enabled. A purpose-built app called BRider then logged movement of the individual in or out of each geofence.

Push notification messages notified the owner/manager of the visitor and welcomed the visitor to the vineyard. The visitor movements were collated into an electronic visitor book for each geofence, providing the visitor name, date of visit, timestamp and visit duration.

The total number of boundary crosses for the pilot was 4,194 pairs, with a pair being an ‘in’ and ‘out’ of the same geofence by the same visitor.

“While there were some issues with the geofencing software, which is normal for a new technology project evaluating a minimum viable product, we have confidence in geofencing as an important tool to protect South Australia’s vines,” said Vinehealth Australia Technical Manager Suzanne McLoughlin, who managed the pilot project.

“Participant feedback was positive about the value geofencing could offer vineyard businesses in the protection and management of significant pest and disease incursions.”

Ben Zander from Wroxtton Grange vineyards in the Barossa was a pilot program participant. “The visitor movement reports via the app reinforced how often winery representatives or contractors come onto my property without my prior knowledge. This is valuable information for my own biosecurity planning,” Ben said.

“We need our peak industry bodies to be aware of current and future technologies to determine where they might fit within the viticultural industry to protect our vineyards. It’s been great to utilise the collective power of an industry body such as Vinehealth Australia to drive what we can’t do as individuals.”

Following the successful pilot project, Vinehealth Australia is confident a geofencing system could add value to biosecurity management for the industry, with appropriate wine industry and government support.

“Project Boundary Rider provided us with a unique opportunity to evaluate geofencing technology for the wine industry with a group of engaged growers,” Suzanne said. “We thank all involved for their efforts in testing the technology on their properties – their feedback will be valuable for future geofencing projects.”

The movement of people and vehicles is a key biosecurity risk for vines, as pests and diseases such as phylloxera can be spread on footwear and tyres.

“Phylloxera doesn’t respect vineyard boundaries or state borders. We must ensure our biosecurity is rigorous and we must be looking at new technology to support vineyard owners in their efforts,” Inca said.

“The biosecurity landscape is constantly evolving, with trends in trade, tourism, climate change and business ownership increasing the extent and nature of biosecurity risks.

“We have the opportunity as an industry to engage with technology providers and drive how it can benefit us in enabling better biosecurity systems for our industry.”

The Boundary Rider pilot project was funded by the State Government (PIRSA) and Vinehealth Australia, and was supported by 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/.