

kiwifruit

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Kiwi Tamer

**Fight builds against
wild kiwifruit vines**



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Untangling the vexatious vine

Waging war on wild kiwifruit

Zoe Hunter

The next phase of wild kiwifruit control is taking contractors further and further into New Zealand's native bush.

A large wild kiwifruit vine coils around a tall pine tree like a python suffocating its prey.

But the tree stands triumphant in the Te Puke gully, having resisted the vine's attempt to pull it down.

Thankfully, contractors arrived before the wild vine could do more damage.

Andrew McConnell, who is in charge of Kiwifruit Vine Health's wild kiwifruit vine control programme, inspects the vine dangling from the tree in defeat.

Searching for the remains, he sifts through the leaves, twigs, and bark below before dragging out a thick, dead vine.

Pointing to fresh sap bubbling around its edges, McConnell explains the vexatious vine that was cut down months ago was trying to regrow.

"It is like the cockroach of the weed world," he says. "You have to give it credit. It is really good at surviving."

KVH works with regional councils and landowners to manage wild kiwifruit populations to reduce the biosecurity risk to New Zealand's kiwifruit industry.

National Operations and Compliance Officer McConnell - armed with vast biosecurity and pest management experience - is leading this particular battle.

Ironically, Te Puke - the kiwifruit capital of the world - is also ground zero for its unfortunate cousin: wild kiwifruit.

McConnell says kiwifruit typically dislike wet conditions. But, like some kind of swamp monster, the vines develop a different genetic make-up out in the wild.



“It is like the cockroach of the weed world. You have to give it credit. It is really good at surviving.”

Photo 1. Rachel from Full Circle casting her eye over a recently completed wild kiwifruit vine site.



Rachel from Full Circle and Andrew from KVH on-site discussing techniques for control of wild kiwifruit vines.

Its symbiotic relationship was China where kiwifruit grew wild in coniferous forests.

“When it comes to New Zealand and finds pine trees, it is just like seeing an old friend.”

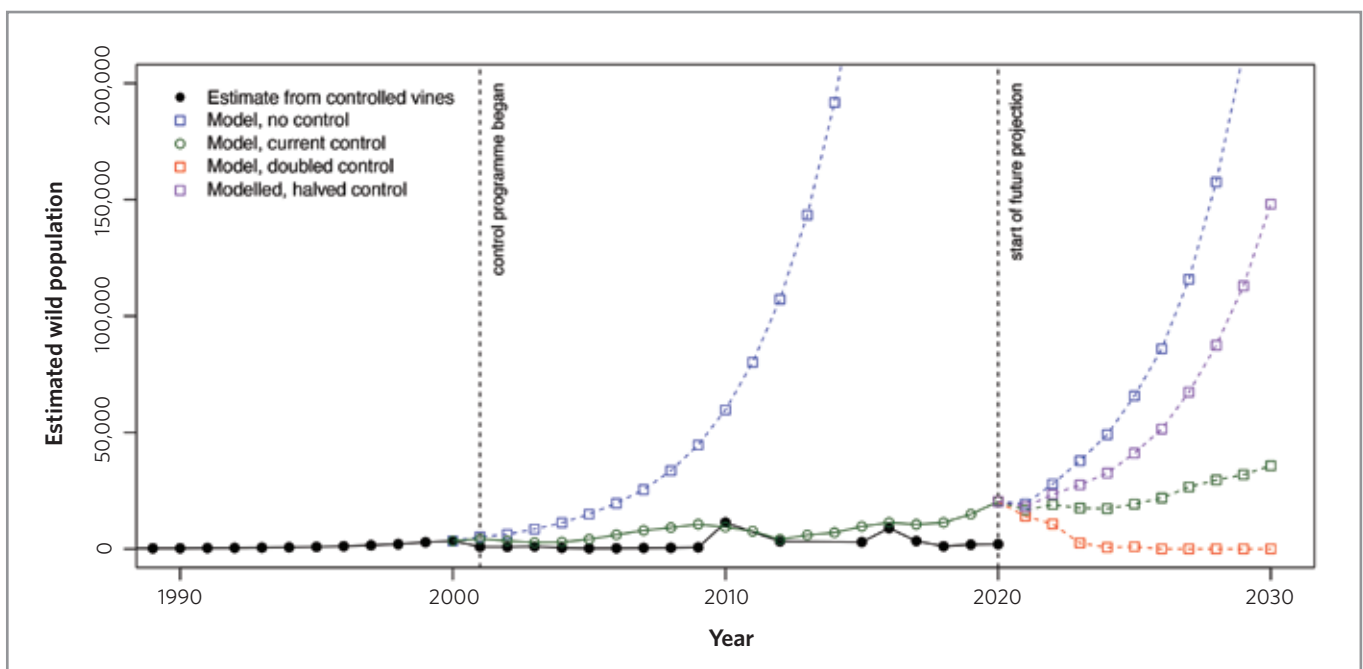
What we know about how exactly wild kiwifruit spreads, McConnell explains, is it can germinate wherever birds, rats, or

possums deposit the seeds. Birds, for example, feed on kiwifruit left on vines, in reject bins, or from stock feed in paddocks then spread it into gullies of neighbouring orchards.

Seed could also be spread from flash flooding or simply from a home gardener growing the odd vine that has essentially “gone nuts”.

McConnell says wild vines can harbour pests and diseases, acting as a reservoir for biosecurity threats. Left uncontrolled, a monoculture of wild vines could be created, pulling down native trees, pines, and smothering forestry plantations in their warpath.

“I have never known anything to be so resilient, so persistent, and so strong,”



42 Figure 1. Modelling showing the estimated wild kiwifruit vine population, over time, with and without control work undertaken.

says Rachel Farey, a contractor at Full Circle Arboriculture.

A blanket of vines, Farey describes, can be so thick that no light gets through and nothing survives in its darkness. "It is sometimes literally pitch black in there."

Their mission is to find the source and destroy it, which can sometimes be a dangerous task.

That is where Farey and her army of abseiling arborists come in.

Chainsaw in hand and descending deep into a steep gully is where you will often find Farey.

The experienced arborist has developed meticulous training for her team who will often work in isolation and without phone signal. "It is really specialist work and there is no ambulance coming to save you."

Locked in place

KVH and the Bay of Plenty Regional Council agreed in 2020 to continue working to manage the pest plant for another 10 years.

Under the new agreement, KVH manages running the programme while contributing \$150,000 annually towards control and surveillance costs. The council contributes \$100,000 annually and supports KVH in surveillance and gathering landowner contributions.

Right now, McConnell says they're in a good place.



“ I have never known anything to be so resilient, so persistent, and so strong. ”

Photo 3. Andrew from KVH in a Te Puke gully ensuring no regrowth in a pile of dead vines collated by contractors.

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Photo 4. A pine tree close to harvest, almost being taken down, before control work protected the tree and killed the vine.

An independent review of the wild kiwifruit vine control programme, by senior lecturer Dr Jon Sullivan at Lincoln University in 2022, allowed them to create a five-year plan. The review identified more control and surveillance was needed to stay on top of the wild kiwifruit vine population. KVH accepted that mission.

So far in 2023, contractors have controlled more than 4600 wild vines and 1 hectare of matted vine areas across nearly 50 sites.

By the end of the year, their aim is to have controlled 15,000 individual vines and up to 3 hectares of matted vines.

They have doubled the number of contactors from two to four - three of those working in the Bay of Plenty and the other in the South Island's Golden Bay.

In June 2023, helicopter surveillance helped to identify new wild kiwifruit infestations in Te Kaha, Riwaka and the Marlborough Sounds.

More than 20 infestations have also since been recorded in the Waikato, with wild kiwifruit added to the council's regional pest management plan.

In two years' time, the programme will be reviewed again and a new mission granted. ■

How to prevent wild kiwifruit

Growers

Remove unpicked fruit from vines and mulch as soon as possible.

Post harvest operators

Cover bins of reject fruit to prevent birds feeding on ripening fruit.

Farmers

Cover stockpiles of fruit with shade cloth, netting, or similar. Feed out only what will be eaten by stock at one time.

Members of the public

Be careful when disposing kiwifruit, particularly while out in the bush.

Source: kvh.org.nz

From coast to coast

A South Island stand against wild kiwifruit

Coming across a fruiting wild kiwifruit vine in New Zealand's back country might seem like finding mana from heaven, but like any plant growing out of place, wild kiwifruit has the potential to cause havoc when it escapes into our native habitats.

While the contribution of domesticated kiwifruit to New Zealand's export economy has been substantial, wild kiwifruit's potential as an invasive weed has become concerning over the years and there are partnerships in growing regions to combat it, supported by KVH, as the kiwifruit industry's dedicated biosecurity organisation.

A top of the South Island conservation programme, the Restoring and Protecting Flora Project, is mobilising the effort to control wild kiwifruit incursions into native habitats to prevent this climbing vine from smothering native species in the region.

The project is surveying and controlling wild kiwifruit incursions from coast to coast - from the Karamea River in the west to the Marlborough Sounds and Wairau River in the east, taking a landscape-scale approach to dealing with this significant weedy invader. Last year's surveys turned up areas of wild kiwifruit in Karamea and Golden Bay that are now being controlled. This year's surveys are on a large scale - almost 650ha in Tasman and 420ha in Marlborough, which will inform further control efforts to ensure the weed is kept at bay.

This phase of the control programme is being funded by the Department of Conservation's Jobs for Nature fund and follow up control will largely be funded by KVH, on behalf of the kiwifruit industry.

Wild kiwifruit presents a two-pronged threat. The kiwifruit industry's concern is that wild kiwifruit can act as a vector for Psa and other kiwifruit pests

and diseases. Equally concerning is its environmental impact, as the seed is easily spread by birds eating the fruit, and the fast-growing vines can smother native habitats, causing them to collapse, leading to catastrophic loss of plant and animal species.

KVH recommends being careful with the disposal of kiwifruit, especially in the bush where the seed can easily germinate, and asks farmers, growers, and industry operators to take steps to prevent wild birds feeding on fruit as they are a key vector for seed spread.

If you come across wilding kiwifruit infestations, please let your local council know the location so they can map it and add it to their control plan. If you are carrying kiwifruit whilst out and about, take the scraps home with you and dispose of them safely rather than leaving them in the bush as it only takes one tiny seed to start a whole vine. ■



Photo 1. Wild kiwifruit vines in the Marlborough Sounds.



Photo 2. Kumanu Environmental undertaking control of wild kiwifruit vines in the Marlborough Sounds