CAWTHRON MARLBOROUGH ENVIRONMENT AWARDS

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CAWTHRON MARLBOROUGH ENVIRONMENT AWARDS 2017

Morgans Road Nursery

JUDGES' REPORT

HABITAT ENHANCEMENT/LANDSCAPE

DOG POINT ESTATE LIMITED

INTERVIEWED	Nigel Sowman, Dog Point viticulturist
DATE	29 November 2016
JUDGES	Chris Beech, Grahame Smail, Penny Wardle

INTRODUCTION

Dog Point vineyards and winery demonstrates conservation with a commercial edge.

Dog Point is one of the largest organic vineyard in New Zealand, with 110 hectares planted in BioGro-certified vines and 2ha uncertified (to be removed and replanted). The rest of the 200ha property is taken up by native plantings, trees and grass areas, a large vegetable garden and apricot orchard, livestock paddocks, pine nuts and olives plus winery and vineyard buildings, accommodation and homes for family and staff.

Five families live on-site and 20 staff are employed, rising to 110 during vintage including contractors.

Mulch is made from prunings and winery waste, applied to plantings throughout the property. Leachate from mulch-making is collected in a sump and applied as fertiliser to the vineyard.

While premium winegrowing is what earns Dog Point its income, directors Ivan and Marg Sutherland prioritise creating a diverse and attractive landscape for staff and visitors to enjoy. Their responsible stewardship of the land is inspirational.

GENERAL INFORMATION

Dog Point Vineyard in Fairhall, west of Blenheim, encompasses multiple vineyards on flat and gently rolling sites. The earliest vineyard was established in the 1970s and the Dog Point label launched in 2004. In 2001 the company applied for BioGro organic certification for the entire planted area.

The 2016 Dog Point vintage is the first when all grapes processed have been fully certified so wines can be labelled organic. About 33% of the crop was sold to other wine companies last year including fruit from 20ha in more recently purchased vineyards yet to complete certification.

The Sutherlands are creating a pleasing landscape of vineyards interspersed with open spaces, restored native bush, wetlands, park-like plantings and pasture.

"Parks and reserves" are so extensive they take one and a half days to mow and a fulltime gardener is employed to develop and maintain them.

A 2-3 hour walk takes visitors along the banks of Mill Stream where native plants are thriving. Planting began in 2007 and the earliest developed areas are now self-sustaining, with dominant plants seeding and filling gaps left by less successful species.

This area connects with other riparian plantings by fellow members of a Mill Stream Enhancement Group.

Mass plantings of native plants have grown quickly. As areas mature, native birds such as tui, bellbirds and kereru have increased in number, while introduced bird species, including those that are pests in vineyards, appear to have decreased.

Exotic plantings include a small radiata pine woodlot for timber, *Pinus pinea* for pine nuts, eucalypts, flowering gums, Tasmanian blackwoods, black walnuts, black poplar, blue spruce and tree lucerne.

Grapes and wine are produced organically, not to attract price premiums but because the Sutherlands reject broad-scale cropping. Believing that the days of heavy chemical use in the industry are numbered, they aim to be up and running with an organic approach before pressure comes on for industry change.

Seven to eight years after the vineyard gained certification, dramatic changes are being seen in the vineyard as fungal diversity increases and soil structure improves. This includes vines becoming increasingly resilient in dry years.

Despite slightly more tractor passes than in a conventionally-managed vineyard due to frequent mowing, susceptibility to compaction has reduced and water holding capacity increased, says Nigel.

He has found that contrary to popular belief, nitrogen management, not weeds, is the biggest issue during organic conversion. Pre-planning is required to gradually turn off artificial nutrition.

Dog Point has found it costs about the same to produce a tonne of organic grapes as non-organic, although there is more work.

A 10-metre buffer zone – conveniently the width of headlands – separates the vineyard from non-organic neighbours.

Cattle and sometimes sheep graze about 50ha of paddocks. Sheep also graze the vineyard from after harvest until early spring, eating back weeds and recycling nutrients. Cider vinegar is used as a drench against internal parasites instead of chemical drenches. However, a change in BioGro rules allowing non-certified stock to be introduced without quarantine has been helpful.

Staff all have access to produce from the large garden where hothouse tomatoes, potatoes, broad beans, mandarins, feijoas and asparagus are grown. What was a commercial apricot orchard is now certified organic, supplying fruit to staff, family and friends and olive oil and pine-nuts are also produced from the property.

The Bell Tower luxury accommodation is part of the business, with guests free to wander the property and meals made from Dog Point fruit and vegetables.

The Dog Point landscape adds appeal to the label.

PROBLEMS AND HOW THEY HAVE BEEN TACKLED

- Many willows along Mill Stream were initially felled then taken away by a digger, their trunks painted with herbicide.
- Willow regrowth is cut out and trimmed back with weed-whackers.
- Native plantings are not organic-certified which means glyphosate can be used to control weeds including old man's beard.
- Every tenth vineyard row is planted in buckwheat to attract hoverflies and parasitic wasps to control leaf-roller caterpillars.
- Powdery mildew is becoming an issue in all Marlborough vineyards. Sulphur is applied every 7-14 days, depending on infection levels. Last vintage when infections were especially severe, spraying frequency but not rate was increased.
- Sheep are described as an essential management tool. About 3000 are used as under-vine mowers, as a source of fertiliser and to control sward growth and weeds.
- Creeping red fescue can dominate areas of the vineyard, reducing vine vigour. It prevents moisture soaking through to soil and is unpalatable to sheep. Areas are cultivated then planted into oats then grass over two years, and replanted in vines. The same approach is taken in all inter-row areas where vine performance is consistently poor.

- In the garden, covering potatoes with fine mesh has protected them from psyllid. Oaxacan Jewel, Jaune Flamme, Tigerella tomato varieties are resilient to this pest.
- Couch is the biggest problem in the garden and is hand-pulled.
- Organically-certified Neem oil is used as an insecticide in the hothouse.

SUMMARY

Judges were impressed by:

- Beehives in the orchard area to pollinate fruit trees and wildflowers.
- People are welcome to visit, by request. Walking groups are among visitors hosted.
- Knowledge is shared with organic and non-organic growers, for example New Zealand Winegrowers asked Nigel to talk about vine nutrition at their AGM.
- Irrigation was removed from olives as soon as the area was certified.
- Dog Point Winery sponsors the Grovetown Lagoon wetland restoration project.
- Podocarps are doing well in native plantings.
- Plants from nurseries are often grown on longer before purchase which improves survival.
- Grapes are not planted boundary to boundary. Green space areas include pasture, mown paths and lawns.
- The entire vineyard underwent organic certification, so organics would become the norm and to avoid any risk of transition areas becoming neglected.
- No fertigation on vines, even before organic conversion. Bacteria in the soil is the workhorse of nitrogen fixing.
- Reduced vine canopy and managed yields require less irrigation, minimise disease pressure, and do not restrict fruit ripening.
- Birds are not a major problem. Canopies of susceptible varieties are netted, also rows close to lines of trees.
- Grass grub beetles damage is an issue, especially for Chardonnay leaves, shoots and fruit. Innovative use of fine bird netting as protection has significantly reduced damage.
- New vineyard areas are run non-organically for two years with herbicides used to control weeds, so plants develop strong roots before under-vine cultivating begins.
- Compost is made on a plastic-lined bunded pad – 2/3 prunings and 1/3 winery waste. There were no odours when judges visited. The pile is regularly turned and temperature checked.
- Compost is used as a mulch around the vineyard, native plantings and garden. Leachate collected in a 5000 litre tank is applied at a low rate to vineyards as fertiliser, building biological life in soil. The pad is designed so any runoff flows back on to the pad in a rainstorm.
- Plastic-coated WoodShield pine posts are used in new vineyards and to replace broken posts, to avoid leaching of copper chrome arsenic from conventional treated posts.
- Balage made on the property is fed to cattle or added to compost.
- Broken posts are given away and there is steady demand.
- The site is attractively landscaped, with attention given to detail such as changes from meandering native plantings to parklike areas of grassland dotted with specimen trees. Native plantings are focused along Mill Stream.
- Judges saw eel in Mill Stream, apparently one of several regulars.

- Recycling of railway sleepers to build steps in walkways and deconstructed barrels to make seats.
- Buildings screened by native plantings.
- Water from sheds collected and used for irrigation.

SUGGESTIONS

- Dog Point plantings provide a wonderful habitat for birds but there is no predator control, apart from rabbits and cats. Trapping of ferrets, possums and mustelids would make this a wildlife refuge for bush and water birds.
- Investigate ways of protecting the "parks and reserves" for posterity.
- Recycle irrigation pipe through Plasback in rolls, tied off with baler twine.
- Repurpose old tyres as retaining walls.
- More plantings could be considered around dams.