

Springtime brings life to vineyards

This is the season when the vineyard wakes from its winter sleep and for the grapegrower that means there is plenty to do.

Chris Herden

Materials handling

SPRING SIGNALS A time of transformation, a time when the wine estate snaps out of its winter dormancy and the first flowering buds swell and burst into life.

For the grapegrower it's also one of the busiest times; he needs to move at the same quick pace as the first flush of spring's growth. The to-do list includes mowing the spring grass, keeping weeds and pests at bay and training the young shoots. There are many tasks that need to be done in preparation for the warm months ahead.

"We're well ahead of the trend and by the time we hit spring, we are ready to run," says Geoff McCorkelle, technical viticulturist for McWilliam's Hanwood Estate Winery near Griffith. "When pruning has finished, our sprayers are ready to go. By springtime, spraying is already done and our stocks and chemicals are already secured - this all happens in May. Winter for us is as busy as the growing season, it's just the nature of the work that changes."

The maintenance of Hanwood's sprayers and harvester is carried out during winter. Machinery such as presses and destemmers are stripped down, checked through and cleaned at the end of the previous season.

"Most of our spring preparation is done well in advance. The equipment, the whole spray system and filling stations, are all cleaned and ready to go so that by the time spring comes, the harvester is ready and we don't have to worry about it. If we get a dirty spring, like we have the last couple of years, we're flat out spraying. We've had severe powdery mildew, botrytis fungus and downy mildew in the past two years. The 2011 vintage was a particularly challenging one - the spray intervals, frequency and product choice was critical."

With the region having such a low average rainfall (more consistent showers occur during the winter months), grapegrowing in the Riverina has a high reliance on efficient irrigation.

"The irrigation system starts to kick in in late winter if it's a dry start to the season, which is good because a dry spring means we can drive the whole operation by irrigation. If we do get a wet spring, phomopsis can be a problem on the disease front."

Volunteer species of weedy mixes and rye grass fill the midrows at Hanwood Estate. A pasture mower cuts these back to a ground cover. A thick layer of rice straw, which is tenacious and longlasting, goes undervine along with the self-generating mulch and some knockdown herbicides. During winter, organic matter is laid out across the entire growing area at about 10 tonnes per hectare.

"There is no wire lifting here, we let the vines sprawl," McCorkelle says. "We don't 'shoot thin', we tend to do our crop load manipulation at the pruning stage."

"We have a contract supplier for all our chemicals, stock is held in depot and we get it as we need it, but it is all ordered in advance. We run a big organisation and we need to be organised so that the arsenal is all charged up, the magazine is loaded and we're ready to fire the big guns as needed."

The Justin Vineyard at Frankland River in Western Australia had its first plantings in the 1960s and has a reputation for supplying premium brands. Richard Bateman, who oversees the day-to-day management of Justin's 89 hectares of vines, has a detailed springtime checklist of the tasks that need to be done before and after budburst. It all begins with the post-prune clean-up and mulching of canes.

"We repair and calibrate our fungicide sprayers, have the tractors serviced in preparation for the season's spraying and we do a pre-season check of irrigation pumps and all infrastructure, including fertiliser injection facilities. The front-end loader and forklift must be running well, readily available for handling bulk deliveries. Loading areas need to be free of obstructions and drivers notified of delivery areas and potential hazards, namely wet ground where bogging is possible."

Bateman adopts a minimalist approach

to herbicide usage, with applications at key times during early and mid-spring to control weed growth.

"At springtime our undervine herbicide and selective broadcast fertiliser applications are done," he says. "Our chemicals and fertilisers are delivered in bulk for the season because much of this is applied during spring's pre-flowering. These are stored in accordance with occupational health and safety (OHS) and hazard analysis and critical control points (HACCP) specifications and we have separate storage areas for wet and dry fungicides, herbicides and insecticides."

Bateman is constantly on the lookout for powdery mildew flag shoots, mites, weevils and earwigs following budburst. "Of course, prevention is always better than cure," he says. "There are always the potential pest and disease problems at this time of year and you need to be proactive, flexible, and have the ability to deal with a situation quickly and effectively."

He says a permanent midrow sward of turf and wild perennials is grown and then mulched back under the vines as a weed suppressant to aid the soil's moisture retention.

"The dry summers here result in the midrow drying off and subsequently there is minimal undervine weed growth."

The Justin Vineyard irrigation system is flushed in spring and any needed repairs are carried out. Foliage wires are lowered for the new growth and there is always machinery maintenance and calibration to be done. Some springtime vineyard safety and maintenance tasks deserve a special mention.

"Such as replacing or recharging spray tractor cab filters prior to spraying and double checking all relevant safety gear is in stock, still viable and operational."

Vine growth during spring in the Riverina wine region of New South Wales is vigorous due to a dry semi-arid climate. The day temperatures during the cooler months are still reasonably high, so for grapegrowers in this region, jobs normally done in spring start much earlier. **GW**