



In recent years, Henri has reduced his rodent baiting program significantly. The resident snakes in the adjoining regenerated riparian zone help to control rodents in the orchard. They do a good job and as long as they don't venture too close to his house, Henri leaves them alone.

The main pest insects in a macadamia orchard are Macadamia Nut Borer and Fruit Spotting Bugs. Henri's commitment to natural approaches sees him work closely with the Department of Primary Industries in conjunction with Bioresources using known biological control methods, as well as trialling new and innovative ways of combating pest insects. He uses both Trichogramma and Anastatus parasitic wasp species to attack the eggs of the pest insects, reducing the need for applications of chemical. And the results have been good.

OUTCOME

Henri takes a technical approach to land management and operates his farm and business successfully while taking care of the environment.

Henri is a wonderful example of how farming in a drinking water catchment can be successful, without compromising the health of our waterways, our local drinking water supply, the land, wildlife and people.

These articles were prepared by Shannon Greenfields for Rous County Council in liaison with participating landholders.

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Photography: Trevor Worden.
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7. RIPARIAN VEGETATION ACTS AS A BUFFER BETWEEN THE FARM AND EMIGRANT CREEK DAM 8. FARM GATE SIGN



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MEET HENRI

A CARETAKER
OF OUR REGION'S
DRINKING WATER



INSPECTING THE HARVEST

Henri is also a land manager, producing 30 tonnes of quality macadamia kernel every year.

His immaculate 40 hectare Letaba Macadamia Estate is at Knockrow, in Northern NSW. It's just 11km South of Byron Bay and is positioned within the Emigrant Creek drinking water catchment.

DRINKING WATER CATCHMENTS

A catchment is an area where water is collected by the natural landscape.

Water flows through the Emigrant Creek catchment to Emigrant Creek Dam.





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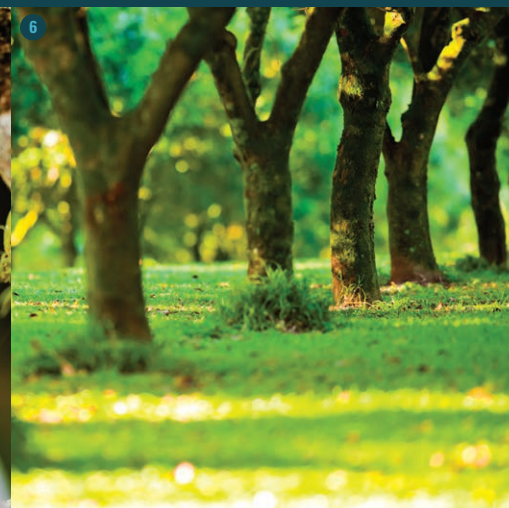
1. LETABA MACADAMIA ESTATE 2. EARLY MORNING ON THE FARM 3. THE HARVEST 4. ORGANIC COMPOST MADE ON SITE 5. PARASITIC WASP EGGS 6. INTER-ROW GROUND COVER REDUCES EROSION



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Water from the dam is then used to supply drinking water to Newrybar, Tintenbar, Knockrow, Lennox Head and Ballina.

The quality of water from drinking water catchments varies depending on the type and level of activity within them. Most of the land use in the Emigrant Creek drinking water catchment is agriculture. This can affect water quality by introducing pathogens, nutrients, sediment and chemicals into the waterways.

Protecting water quality in catchments is particularly important because it influences how much treatment and disinfection is needed before the water is safe to drink. Cleaner waterways mean treatment processes are more effective and fewer chemicals are needed.

Protecting the region's drinking water catchments and water quality is a responsibility Rous Water shares with industry, businesses, landholders, communities and individuals.

Being a land manager within a drinking water catchment comes with challenges and responsibilities. It is important that property owners control the hazards that are a risk to water quality. This ensures drinking water quality is maintained at acceptable levels.

Henri is serious about protecting water quality. He manages his property and

agricultural activities to minimise soil erosion and control runoff.

Henri knows that good land management practices not only protect his assets and business, but also the health of our waterways, drinking water supply, land, wildlife and people.

SOIL

Henri knows that soil health is vital for a good crop return and positive environmental outcomes.

Microbial activity in the soil at Letaba is thriving. Henri applies organic fertilisers and compost carefully made on-site from a mixture of chicken manure, sawdust and macadamia husks.

Mulch and cover crops protect soil. Henri has established a groundcover of Sweet Smothergrass (*Dactyloctenium australe*) from turf runners throughout his orchard. The Smothergrass provides his farm with weed suppression and increased water filtration. It has also reduced soil erosion and loss of fertilisers and compost, and reduces the need for chemicals and spraying.

Henri regularly prunes his canopy to let sunlight onto the orchard floor, thereby helping to maintain the groundcover.

As well as using groundcover, Henri controls erosion on his estate by creating contours, swales and diversion

banks across the orchard to manage the flow of water.

RIPARIAN RESTORATION

Where agriculture occurs within a drinking water catchment, the condition of the riparian zones along waterways can have a great influence on the quality of the drinking water.

Working with Rous Water and its Healthy Catchment Program, Henri has regenerated the boundary of his property creating a rich riparian zone. Thousands of rainforest seedlings have been planted along the entire length of creek frontage.

The riparian zone at Letaba Estate works to create a buffer zone between Henri's agricultural activities and the drinking water supply. It also slows surface runoff, reduces soil erosion, traps sediment, nutrients and chemicals; and provides habitat and a corridor for wildlife.

PEST MANAGEMENT

Conventional pest management in the agricultural industry can damage the environment and significantly affect the quality of water in a catchment.

But Henri is committed to using natural approaches to pest management in his orchard.



SWEET SMOTHERGRASS GROUND COVER PROTECTS THE SOIL