



Crimson Rosellas

Party animals into colour and decoration

You will most likely be familiar with this pretty parrot, as it is a common sight in gardens, orchards and bushlands around Hoddles Creek. The Crimson Rosella is one of Australia's most colour variable birds, with colours ranging from deep crimson red to pale yellow. They are commonly found along the east coast and south east of Australia from Queensland to South Australia.

The variations in colour depend on the location and the actual subspecies or race. Our local rosella with its rich crimson and blue colouring is *race elegans*. Around Adelaide, where it is known as the Adelaide Rosella (*race adalaidae*), the head and breast are orange, while along the Murray and Murrumbidgee the head and breast are yellow and it is known as the Yellow Rosella (*race flaveolus*). All forms however are classified as one species – *Platycercus elegans* – with the common name Crimson Rosella.

congregate in pairs, small groups and feeding parties. The largest groups are generally juveniles who will gather in flocks of up to twenty birds, chattering noisily like children at a party.

Rosellas are monogamous and, during the breeding season, adult birds will only forage with their mate. Around this time they can also be observed checking out tree hollows in search for a suitable nesting site, which they may return to in subsequent years, while the juveniles are more nomadic.

Rosellas forage in trees, bushes and on the ground for the fruit, seeds, nectar, berries and nuts of a wide variety of plants. Despite this diet, they are not useful seed-spreaders, as they crush and destroy the seeds in the process. This diet can also put them at odds with farmers who depend on a fruit and grain harvest, as well as backyard gardeners trying to do their bit towards self-sustainability, as the birds are attracted to a well set dinner party.



Photo: Michelle Knoll

Adults and juveniles show striking colour variations, well illustrated by our photo. Juveniles are said to 'ripen' as they age and turn from green to red – something like the apples they are so fond of! The blue tail feathers of the adult Rosella are said to be a favourite decoration of the satin bowerbird. The Crimson Rosella is a social bird that will

Rosellas love to bathe and are easily attracted to a regular water hole or bird bath. Threats to the Rosella include hunting by domestic cats and foxes, previous shooting by farmers and loss of habitat, in particular the loss of mature trees and their hollows, which are their almost exclusive nesting preference.

Why are our trees dying?

Driving around the main roads of Hoddles Creek I can't help but notice the number of trees that are dead and dying along our roadsides. Has anyone else noticed this? What makes it so obvious is the fact that it's not just single trees, but large groups or stands of previously healthy and, judging by their size, mature trees.

Friends of Hoddles Creek members noted and discussed this phenomenon over two years ago, raising concerns over what might be the cause and what could be done about it. Possibly the most dramatic example is on Lusatia Park Road, the main exit for most residents. Heading towards the highway on the straight length of road approaching Lusatia Park property, what was once an avenue of glossy green gums looks is now an avenue of white skeletons.

Since this first observation we have been asking two questions of various experts: "What is causing these trees to die?" and "What can be done about it?" Sadly, it seems there are no definitive answers to either question. We have been doing some research of our own, on that largest of all resources, the World Wide Web, and would like to share some possible theories and solutions.

Tree dieback

Much research has been conducted over the years with numerous theories advanced to explain dieback in eucalypts throughout Australia. Dieback is a term used to describe the death of vegetation where a tree or shrub begins to die (prematurely and sometimes suddenly) from the tips of its leaves or roots. It begins with a thinning of the crown starting at branch ends and progressing towards the trunk, resulting in dead branches protruding beyond the remaining foliage.

Some trees may produce new growth and it can be years before a tree eventually dies. While all plants have a life-span and individuals will eventually die, it is less common for large patches of plants to die at once. Theories for this dieback include exotic pathogens, native organisms and animals, climatic factors and human impacts.

Phytophthora

One exotic pathogen that is known to cause dieback in some plant species, including eucalypts, is *Phytophthora cinnamomi*. Previously classified as a fungus, it is now known to be a water mould. The scientific name is derived from the Greek words meaning 'plant destroyer', which is exactly what this microscopic mould does by attacking the root systems of susceptible plants and ultimately killing them. Associated with water, *Phytophthora* favours warm, wet soils with poor drainage and is spread through the movement of water, soil and plant material. Contaminated soil from gravel pits for road works, use of contaminated water for fire fighting, activities such as bushwalking, horse

riding, trail bike riding and even the movement of native animals may all contribute to its spread. *Phytophthora cinnamomi* has been listed as a 'potentially threatening process' under the *Flora and Fauna Guarantee Act 1988*.

Insects and animals

Insect attack on already stressed plants may be another contributing cause of dieback. In healthy vegetation, insect numbers are usually controlled by birds and other natural predators, but insects can benefit from increased pasture, use of fertilizers and loss of natural predators and sometimes reach plague proportions. Massive attacks by defoliating insects are known to have caused dieback in some native plant species.

Folivores, animals that specialise in eating leaves, such as possums and koalas, have also been found to contribute to dieback in some parts of Australia. This is noted especially when forests are logged and cleared, depriving these animals of their food source.

Climate change and human impact

Climate change is often cited as the cause for dieback in trees, but it appears that research to date does not specifically point the finger to this as the primary cause. Weather conditions such as drought and floods that may be linked to climate change can certainly cause significant stress to trees and this may be the trigger for other contributing factors to move in. However, these other, often multiple, factors are commonly found to have a greater contribution.

Human impacts linked to agriculture, such as land clearing, creation of pastures and grazing and fertilisation can upset the balance of insects and their predators, which can lead to insect attacks as already discussed. Landscape clearing and the consequent ecosystem dysfunction are thought to be a primary cause.

What can be done?

Whatever the cause, there is no turning back the clock! We need a greater understanding of this issue and there is clearly a need for further research. In the meantime, some suggestions for preventing further dieback of our trees include:

- restoring understorey vegetation
- minimizing fertilizer and chemical use
- creating blocks of vegetation and linking areas with corridors
- retaining live and dead trees with hollows as wildlife habitat
- fencing to exclude livestock
- managing nutrient disposal
- controlling salinity and erosion through revegetation
- controlling predators of wildlife.

Tackling dieback, then, is part of an overall need to manage our land more sustainably. Let's make an effort to protect our precious environment for future generations.



Dead eucalypts on Lusatia Park Road (main photo) and Eacotts Road.



Like to join FOHC?

The Friends of Hoddles Creek are always on the lookout for new members to add new ideas, new helpers and new friends to our group. If you'd like to join, simply contact us with your name, address and phone or email details. You can mail these to FOHC, PO Box 298, Yarra Junction, Vic 3797, or email us at friendsofhoddlescreek@gmail.com.

See more at our new website (www.friendsofhoddlescreek.com) or on Facebook – just search 'Friends of Hoddles Creek' or 'FOHC'.



In common with our readers, Friends of Hoddles Creek are looking forward to Christmas and a chance to relax with family and friends over the holiday period. We hope that you have found this year's Newsletters both entertaining and informative.

Summer in the Yarra Ranges can present some challenges, as the land dries out and the risk of fire increases. Especially in this el niño year, make sure your fire plans are in place, so that your summer can be a happy and a safe one.

We wish all our readers a very Happy Christmas and look forward to providing you with more food for thought in 2016.

White Christmas

It's hard to miss at this time of year. The Victorian Christmas Bush (*Prostanthera Lasianthos*) seems to be everywhere – dotted through the bush, showing in beautiful profusion along the rail trail in Yarra Junction – a timely reminder that Christmas is almost upon us.

There are several Australian native species with the common name of Christmas Bush, although this actually varies from state to state. The Victorian plant occurs throughout the eastern states – Victoria, Tasmania, New South Wales and Queensland.

This most attractive plant is a tall shrub or small tree and is the largest of the Mint-bushes, of which there are about sixty-five species. While it is a plant of shaded gullies and is common along our creeks, it is found in both wet and dry sclerophyll forest. Christmas Bush tolerates a wide range of environments and so can frequently be seen growing along our roadsides. Flowering time is November to February. The flowers which are carried in sprays consist of white shallow bells with yellow and mauve dotted throats.



Spectacular display of Victorian Christmas Bush beside the rail trail in Yarra Junction



Orchid postscript

Well, we told you in our last issue that the native orchid talk would be fascinating and we were right! With our largest attendance for an event this year, the Primary School literally bulged at the seams with interested orchid lovers.

Orchid enthusiast Emily Noble had everyone intrigued with tales of the challenges of orchid hunting and the beauty that can be found in such tiny packages. Her photographs were stunning and her dedication in getting just the right shot showed patience and commitment to her passion.

Audience questions drew out more stories and a delicious supper rounded out the evening. You can check out some of her photographs in our Spring Newsletter or at www.friendsofhoddlescreek.com.

This was our final event for this year, but rest assured we are planning more events for 2016, so keep your eye out for details in upcoming Newsletters. We'd love to see you.

