

Inquiry into Ecosystem Decline in Victoria

submission from

Friends Of Warrandyte State Park Inc (FOWSP)

ABN 94 1701 566 55

by committee members

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FOWSP

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Who We Are

Friends Of Warrandyte State Park (FOWSP) is a volunteer group of 285 families, with a mutual interest in the conservation and rehabilitation of native bushland in the Warrandyte State Park. Formed in 1982, FOWSP is now one of the largest and most active “Friends” groups in the state.

The aim of our group is to foster awareness of the natural values of the Park and to assist the rangers in the care and protection of both the State Park and the Warrandyte-Kinglake Nature Conservation Reserve. This includes regeneration of Park areas as well as weeds and rubbish removal. Our group also runs an indigenous plant nursery in the Pound Bend area of the Park focused on propagating local provenance species for sale to local government and government agencies and the public.

We also provide information on indigenous plants, weeds and various aspects of bushland conservation to our local community. Our group educates the public on the importance of the environment through local kindergartens, schools, Nature Stewards, Girl Guide & Scout groups, Probup and Senior Citizens Groups.

We liaise with experts from Universities and have collaborated in the production of many publications. We have a comprehensive library for our members. Our nursery manager Josh Revell has discovered new plants and saved endangered plants from extinction.

Bulbine weeds, agapanthus and blackberry removal at Longridge Park by FOWSP



Our Observations

FOWSP volunteers and supporters are deeply engaged with the local bushland. Many have lived in the area for most or all of their lives and are thus uniquely placed to observe changes to the native bushland in Warrandyte and surrounding areas. Some are retired or active professionally in land-care or related scientific fields; others simply love the area and want to protect it as much as possible.

This submission to the Parliament of Victoria Inquiry into Ecosystem Decline in Victoria presents a range of views and concerns, and the threads running through them are:

- there has been significant damage to the ecosystems in the Warrandyte area and surrounds in recent decades
- there is concern about the role played in ecosystem decline by both government bodies and private industry, and by increasing population pressures
- volunteer groups such as FOWSP have worked very hard over decades to push back against the damage done
- The impact on people is profound because of the underlying sense of frustration, anger and powerlessness. These feelings are creating an anxiety that is increasing with the increasing speed of ecosystem decline.

The contributors to this submission have detailed their observations in relation to different parts of Warrandyte and surrounding areas (see below). Without being exhaustive, an outline of these observations is as follows:

- (a) There has been a marked loss of biodiversity of native flora and fauna, examples of which are as follows:
 - Koalas in the Warrandyte region have declined drastically, whereas 20 years ago there was a healthy population. Only one has been sighted in the last year.
 - The numbers of many native bird species have declined, especially smaller birds (e.g. Eastern Yellow Robins, Grey Fantails, Superb Fairy Wrens, Eastern Spinebills), while the numbers of introduced mynas and pigeons have increased
 - A decline in the numbers of native frogs in Warrandyte has been observed
 - The same contributor has also noted the disappearance of microbats
 - In one area of native bushland (Scotchmans Hill in Warrandyte State Park) there has been a complete loss of most native plant species observed in a 1997 survey, such as Candlebark, Yellow Box, and Austral Bear's Ears
 - Many species of native orchids and herbs have disappeared or become much less common.
- (b) Large numbers of eucalypts have died or completely fallen over, e.g. the numerous tree losses in the vicinity of Mullum Mullum Creek, Doncaster East/Warrandyte; the death of Red Stringybarks "at an alarming rate" observed in Hurstbridge and Warrandyte.
- (c) Significant destruction is being done to native species by foxes, cats and dogs, as well as by cars on our roads.
- (d) Invasive weeds (e.g. oxalis, onion weed, thistles, introduced grasses and various woody weeds, etc.) are a major problem, spreading at the expense of native plant species.
- (e) One contributor has observed "disgusting" pollution of our waterways as a result of runoff from our roads. Rubbish dumping is a significant problem too as it ends up in the creeks and rivers.
- (f) There has been a dramatic increase in the presence of deer, resulting in (amongst other things) the destruction of native vegetation due to grazing, trampling or deer rubbing against tree trunks, and the damage or erosion of creek banks due to heavy deer traffic.

Impact on People

We would like to point out the psychological anxiety that is felt in our community as a result of

ecosystem decline, especially since the decline is occurring at such an alarming speed over the last decade in particular. Most contributors have a long connection with the area, are deeply committed to it and so are particularly affected when they see a place they love and have loved for many years decline. This is especially true when faced with very destructive forces such as deer over which they have little control. Most of FOWSP's work involves plant care: weeding and planting are positive actions we can take to show our concern and to contribute, especially for children and grandchildren. Volunteers give countless hours and the work itself can be very hard, especially since many of our volunteers are retired and thus physically challenged. It is heartbreaking when we witness the destruction of work we've undertaken. We presume that these feelings must be felt exponentially by First Peoples who have tended this land for tens of thousands of years.

Our Suggestions

We submit that the Committee carefully examine the causes of ecosystem decline in the environmentally significant Warrandyte area and the potential remedies, with a view to making strong recommendations to government for:

- protecting native flora and fauna, including stronger legal protection at all government levels
- where possible, rehabilitating lost biodiversity of native flora and fauna
- maintaining and expanding wildlife corridors
- greater protection of waterways from pollution and run-off
- effective deer control, and increased priority to the worst invasive animal and plant species
- maintaining and strengthening the role played by First Peoples in protecting and enhancing the natural environment, including by cultural burning (i.e. small-scale burns in the right places in accordance with traditional fire practices), and
- mitigating the negative impacts of climate change.

FOWSP also strongly supports the adoption of such measures throughout the state as appropriate.

Further, we submit that groups like FOWSP that are helping to maintain the bushland for the benefit of the whole community should be provided with much greater government support to continue their invaluable work.

Anderson's Creek, Warrandyte indigenous grass planting by Anderson's Creek Catchment Association with support by FOWSP



List of individual contributors and area commented on

Carolyn Noel	Scotchmans Hill, Warrandyte
Anon	Pound Rd, Warrandyte
Gaille Abud	Flat Rock Rd, Hurstbridge
Linda Rogan	Briars Hill, St Helena and Plenty Gorge
Robyn Gillespie	Warrandyte
Marjan Kiewert	Webb Street, Warrandyte
Anon	Park Orchards and Warrandyte
Paula Huntley	North Warrandyte
Anon	100 Acres, Park Orchards
Anon	Eltham
Lisa Jenkins	Oban Road, Donvale
Jeff Cranston	Mullum Mullum Linear Park/Currawong Bush Park, Doncaster East
Marisa Matthys	Johansens Rd, Warrandyte South
Elise Berry	Osborne Peninsula, North Warrandyte
Anon	Pound Bend, Fourth Hill, Anderson's Creek, Mt Lofty, Black Flat, Warrandyte State Park
Doreen (Dee) Burge	Pound Rd
Don Vincent	Yarra River Environs and Fourth Hill, Warrandyte

The text of the individual contributions is set out below.

Carolyn Noel

Scotchman's Hill, Warrandyte

1. Loss of biodiversity on Scotchman's Hill, Warrandyte.

Scotchman's Hill is a 2.1 hectare piece of urban bush incorporated into Warrandyte State Park in June 1997. A plant survey by a park ranger shortly after this event, with the most outstanding observation being that Scotchman's Hill was classified as Box - Stringybark Woodland; BSWhr and BSWsh. The regional conservation status: vulnerable. When surveyed in July 2020 - only 23 years late there was **one** Stringybark remaining.

There has been a **complete loss** of most native species observed in 1997 such as: Candlebark, Yellow box, Austral Bears-Ears, Button Everlasting – the list goes on. Those that remain are limited to one small patch approximately 100 metres square.

Evidence suggests that the main reasons for loss of biodiversity are invasion by stronger non-native species and over grazing of native fauna because of diminishing habitat. Recently science suggests climate change has played a major part in loss of larger species such as trees. There is a growing awareness in the informed community of Warrandyte that Red Box trees are becoming a monoculture locally.

Over the past 23 years there have been several attempts by concerned locals to conserve what is left of the native vegetation. At present members of Scotchman's Hill Action Group (SHAG) are attempting to conserve the few remnants of indigenous wildflowers and to re-establish some of the lost species. Despite support from Parks Victoria rangers it is obvious that a lack of funding and resources is contributing to the loss of biodiversity in the area.

2. An example of loss of biodiversity due to poor regulations.

The NBN is being installed in Nillumbik Shire in 2020. Nillumbik is a large shire on the outskirts of Melbourne and incorporates a large area of the North Eastern Green Wedge.

Recently an area of significance was completely destroyed by NBN contractors installing a new more substantial power pole for NBN infrastructure. The contractor (Cable Solutions) excavated a rudimentary access to the old pole to be replaced and indiscriminately removed over 35cm of topsoil with its plants and seed bank. Because of lack of oversight at least 35 species of local indigenous species were removed from this site, including native terrestrial orchids that cannot be re-established. Without strong community outrage to rectify the damage this site would have been left to invasive weeds.

This loss was unnecessary as previously the site had been accessed from another direction. The old access to the pole was never remediated and invasive species mostly Cape Broom took over from a range of native flora. If more stringent rules to preserve environmental diversity were adhered to this loss could have been prevented.

Inside deer enclosure



Outside same deer enclosure



Anon.

Pound Rd, Warrandyte

I walk a lot in the bush west of Pound Rd, down the end of Naughton Ave and opposite Glynn's Farm, sometimes through to Petty's Orchard.

Observations

DEER

The increase in deer population is very noticeable. Just about every time I'm out there I notice heavier tracks and deeper penetration into tight areas - like the up-stream walk to the tunnel outlet. I cannot imagine these vermin, massive as they are, will be doing our bush, ground conditions and river turbidity any favours at all. I'd like to know what steps are being taken to correct this situation. It's getting to the stage that I think we need a game keeper, experience suggests that we're unlikely to eradicate deer so we may as well harvest the protein and keep the population under control. Sadly this is an example of Parks Vic inability to manage this land as it was so successfully managed for millennia before.

FOXES/CATS

Ditto.

One of these new laser cat poison machines would do well to be trialled (after ample public notification).

OVERGROWTH

The bush is in a dreadfully tangled messy overgrown way. From my understanding (Gammage, Pascoe) the bush simply was kept like this, it is not a resource to just leave and neglect Parks Vic style: locked-up, un-peopled, unburned, un-traversed, un-seen, un-cared for. I don't have the answer, but I do long for the opportunity to see frequent seasonal burning gradually re-established. I understand this process will cause problems initially but the certainty of this necessity is clear to all I think and it is only a matter of resources. It is my doorstep, I benefit greatly from my time in the bush, I'd gladly do CFA training if it meant that cyclic burning could be established. The cost some day, perhaps not far away, to Warrandyte in keeping the bush in this manner is going to be horrendous. This management project needs an alliance of local government/Insurance companies*/Landcare/CFA/FOWSP and a ground swell of community interest and concern for their own safety as well as interest in seeing the bush reinstated to its once managed condition. Regular burning and re-establishment of open space will be immensely beneficial to both flora and fauna as well as human amenity (the aborigines certainly didn't crash through the bush as we have to these days).

WURRUNDJERI

Step aside Parks Vic, you can't and you don't manage this place. Is there no potential for the Wurrundjeri people to gradually re-assert their management sensibility across their/our beautiful landscape?

WATER MANAGEMENT

Vic roads are the greatest thieves of water quality. Concrete gutters are creeping in to Warrandyte and as water is sped-up and flushed away into concrete pipes so too is our roadside landscape deprived of its water table (a fact that does nothing to reduce fire risk) and the river deprived of

slow release high quality water flows. Dirt roads need better management - not concrete curbs - in order to alleviate the discharge sediment into the river and increased turbidity - it's really disgusting what we do to our gorgeous river; I relish paddling the river in winter and particularly on those few occasions when it's raining to see what comes out of the little tributaries is disgusting.

* because it's long term large scale risk management but it's also going to be short term risk realization when the odd house is lost due to more periodic burning.

New plantings of indigenous species by FOWSP to restore previous car parking area, Pound Bend, Warrandyte



Gaille Abud

North end of Flat Rock Rd, Hurstbridge

I have lived in the area for nearly 50 years and have noticed some major changes in plant varieties. Red stringybarks are dying at an alarming rate and there are very few young ones. Many mature red and yellow box appear stressed.

There are several areas where maidenhair fern was common, and it's now completely absent from one (Schaeffers Rd) and very minimally present in a gully on my property at 395 Flat Rock Rd. There is no apparent local reason for these changes. Housing or other development hasn't happened, or any other water flow, land clearing or land use impacts. We have had some very dry years, and even a good rainfall year such as this year hasn't resulted in regrowth.

There is also what can only be described as an explosion of *Einadia nutans* in the area. I'm aware that it's a local, but have never before seen it in such abundance as the last say 10 years, and still spreading vigorously. It copes very well with heat and dryness.

As a very amateur observer I am very disturbed by the patterns displayed by these two contrasting plants and can only attribute it to persistent changes in environmental conditions.

Linda Rogan

Briar Hill, St Helena and Plenty Gorge, 1982 to 2020

In 1982 when I first came to my present home in Briar Hill, Vic. 3088, it was possible to walk over hillsides still covered with mostly indigenous plants and through wide corridors of native vegetation along the Plenty River and Diamond Creek which connected to bushland along the Yarra River . Where housing was present, the native eucalypts were still predominant and many mature trees were present. Native orchids could be seen in abundance over much of the area that is now covered by houses.

In the 1990s I was one of a small number of people who worked with the local council (Diamond Valley Shire) to preserve one of the most orchid rich areas that was marked for housing development and potentially clearing for a sports ground. Despite our best efforts we were successful in protecting only 2.4 hectares which contains more than 30 species of native orchid including some that are locally rare and vulnerable. The area that was lost to housing contained other species that are not well represented in the reserved area. This reserve is a small treasure but, like the other small reserves in the area, it has become an ecological island, having lost connections and useful wildlife corridors. It now requires many hours of ongoing management by volunteers and council staff to avoid weeds from neighbouring housing intruding and imbalance with overgrowth of some native pioneer plants. It should also be noted that some aboriginal artefacts have been found along the pathways in this reserve.

In spite of my maintaining a mostly indigenous garden, which does attract many native jewel beetles and native solitary bees, there has been an ongoing decline in biodiversity in the immediate neighbourhood. For instance, there has been a marked loss of diversity in the local bird population. We used to have Pardalotes, Silvereyes, Thornbills and Eastern Spinebills on a regular basis and even observed nesting of the Pardalotes. These small birds are no longer seen near our home. Some of the larger native birds remain including many noisy miners.

More and more land is being taken over for housing. Many blocks which once had a single dwelling which was surrounded by native trees and vegetation, have recently been cleared for multiple dwellings with little or no native vegetation remaining. The predominance of large eucalypts such as red box has gradually been lost.

In addition to this loss of flora and fauna and wildlife corridors with increasing housing, recent fires in the Plenty Gorge area and works done while containing this fire has had a detrimental effect on flora and fauna in that area.

As well as increased risk from fires, flora and fauna across the state will be further threatened by the negative effects of climate change.

Action is needed at all levels of government to limit the harm from climate change. Strong effective laws are needed to protect what remains of our native flora and fauna. Where possible, first nations' people need to be involved in looking after country and sharing their unique insights.

Robyn Gillespie

Warrandyte

My observations are

1. No koalas now, whereas 20 years ago there was a healthy population. Roads, dogs and cats leading to their demise
2. less frogs. Again the usual culprits. On one day alone I found 100 dead frogs (4 different species) killed by cars on a 1 km stretch of Husseys Lane after a rain event the previous night. This was a number of years ago and the population on my property has never recovered. In fact I'm just hearing them returning. Before this event the din in the garden at night was hard to sleep through even with all the windows closed.
3. Deer, dear oh dear what can we say. The damage they do to the environment is huge.

National Tree Day planting of grasses and trees by local families, organised by FOWSP, Endeavour Bank, Pond Bend, Warrandyte



Marjan Kiewert

Webb St, Warrandyte

I have lived in Webb Street Warrandyte for nearly 25 years. During this time I have observed:

- a decline of small bird species and reduced numbers of larger birds such as cockatoos and galahs
- an increase of mynas and feral pigeons
- koalas have disappeared
- microbats have disappeared
- a significant reduction of insects, butterflies, moths
- trees are being cut down outside of the guidelines of the bush fire overlay
- an increase of weed species such as oxalis, onion weed, thistles and others.

As well, the building of very big dwellings also adds to loss of habitat and personally I think that the message to 'Clean up your block' in preparation for the bushfire season is not nuanced enough and seems to lead to full scale removal of smaller shrubs or even the scraping back of topsoil.

In fact, it seems that our environment is now often seen as only a bushfire threat and not as habitat.

Anon.

Park Orchards and Warrandyte

I think the big increase in the number of deer in the peri-urban areas of Melbourne, including Park Orchards and Warrandyte, is quite disturbing.

Being part of 58 hectares of neighbouring bush properties, we have noticed significant increases in the number of deer seen and heard on these properties. 5 years ago we would have been 'lucky' to have noticed any deer, now it is guaranteed that multiple deer will be disturbed when walking through the bush areas.

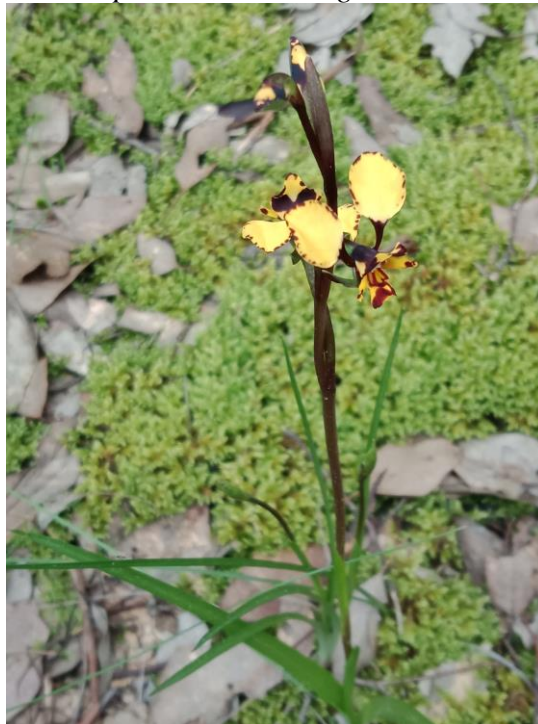
Signs of damage include

- wallows in creeks and small bush dams
- destruction of vegetation through grazing and trampling
- creek banks damaged/eroded due to heavy deer traffic
- death of large numbers of trees due to rubbing by deer

We have also noticed decreases in other native species, most likely due to increased deer presence (but further study is required to confirm this). This includes

- reduced numbers of macropods (Eastern Grey Kangaroo and Black Wallaby)
- reduced numbers of reptiles (for the first time in 11 years no snakes were observed near our house)
- reduced sightings of other mammals (e.g. echidna - few scratchings as well, possums, sugar gliders)
- reduced sightings of small birds (e.g. eastern yellow robins, grey fantails, superb fairy wrens - some are present but in much lower numbers).

Tiger orchid, diuris pardina, becoming uncommon in Warrandyte



Paula Huntley

North Warrandyte

Since we moved to North Warrandyte from Kinglake, following the 2009 Black Saturday bushfires, there has been a lot of environmental damage on our 1.8ha block.

When we bought our property which meets State Park at the river, there was a lot of understory grasses and shrubs even though the millennial drought had not yet broken. There seemed to be enough there to feed the local fauna and yet still hang in there. Rabbits were a bit of a problem but a lot was being done to control them.

Unfortunately, a few years ago Deer moved in and have overwhelmed the area and now our block has been decimated! There is no understory on a lot of our block, young trees are being knocked over and soil is more compacted! Our native animals are starting to struggle, in their search for food!

It is a very disheartening state of affairs.

Deer damage to creek gully and frog/aquatic animal and plant habitat, North Warrandyte



Anon.

Park Orchards

I have been a resident of Park Orchards for 23 years, living next the 100 acres nature reserve. Would you please consider a comment regarding the use and destruction of nature reserves by mountain bike riders. In the 100 acres bike riders repeatedly dig holes to construct illegal bike jumps in the middle of the reserve, carving new tracks for mountain bike riding, destroying rare and protected vegetation, including orchids, sedges and native grasses, chocolate lilies, bulbous lilies, hardenbergia, native clematis and other rare plants. Weeds are being spread by bike tyres throughout the reserve, away from main tracks. As a side effect, the number of swamp wallabies seen in the reserve has been significantly reduced, as has the number of echidnas, blue tongue lizards, snakes such as the white lipped snake, and other native species. Members of the public remove frogs and tadpoles from the dams located in the reserve. Dogs are roaming through the reserve off lead, chasing native wildlife.

The compound effect is a significant loss of native flora and fauna. All flora and fauna in the reserve is protected, but council, I have been told, has not got enough resources to police that regulations and bylaws are being adhered to.

The reserve is one of the reserves in greater Melbourne with significant biodiversity value, but lack of oversight and enforcement of its status as a nature reserve is destroying biodiversity.

A stunning example of the rare Dianella perfragens, inside a deer enclosure, Jumping Creek Reserve, Warrandyte



Anon.

Eltham

I have lived in Eltham (this may not qualify as 'Warrandyte region') for over thirty years, and have observed significant decline in biodiversity in the area over that time. I am unable to quantify these observations so they may not be much help to you, but they may resonate with others' observations over the last three decades.

Patches of remnant bushland in Eltham have become considerably degraded over the years, with heavy feral weed invasion along roadsides in Eltham South, where once a wide variety of indigenous flora grew, including over ten different types of terrestrial orchids in our immediate neighbourhood (several types of greenhood orchids, sun orchids, onion orchids, waxlip orchids, spider orchids, caladenia species etc.) - now only a small patch of greenhood orchids (*pterostylis nutans*) are left. The roadsides also used to support a prolific range of small herbs such as chocolate lilies, vanilla lilies, early nancies, blue stars, bulbine lilies, helichrysum daisies, yellow stars, milkmaids etc., most of which have disappeared. Many small shrubs such as dillwynia and platylobium species, epacris impressa and appleberry have also disappeared from the roadsides. Ozothamnus, bursaria and cassinia can still be found. Native grass species have fared a little better, but are hard to spot among the weeds.

The bird population has changed over the years. Many small forest birds are rarely seen now – once common species like eastern spinebills, thornbills, blue wrens, new holland honeyeaters, pardalotes, grey thrushes, grey fantails, silvereyes, white-plumed honeyeaters and the like have largely disappeared from our area. While cockatoos, lorikeets and rosellas are still plentiful, as well as magpies, currawongs, choughs and butcherbirds, smaller birds have been routed by the predominance and dominance of noisy miners.

The loss of biodiversity is extremely concerning. I hope your submission is successful in drawing attention to this significant problem.

Lisa Jenkins

**Oban Rd, Donvale
2014-present**

We moved to this acre property in 2014. We came from London but I'd grown up in the area. Even though I'd learnt a little about garden and landcare growing up, I'd forgotten many of the details in living for many years in big cities overseas.

The house and garden were in a neglected state when we moved in. A friend pointed out to me that we still had some core remnant vegetation in three areas - the block is covered in eucalypts and he was referring to the understory of indigenous grasses and wildflowers. As is typical in the area, the block is very steep and terraces had been gouged out in order to build the house, pool and shed. These areas have largely been planted with exotics.

I realized that I could protect, maintain and extend the remnant areas, if I had help and encouragement. I learnt that our local council, Manningham, offers environmental assistance to residents-grants to cover costs incurred protecting indigenous vegetation, site visits by environmental officers and so on-and I took advantage of these.

I also decided to become a volunteer at Friends of Warrandyte State Park, both to contribute locally and to have access to their resources. I have continued to be a volunteer and am, in fact, now a committee member. FOWSP has provided me with the knowledge, confidence and plants to continue my work on the acre. I could not have done it without FOWSP and the services offered by Manningham.

In the last years on the block we have:

- removed significant numbers of weeds, including two Weeds of National Significance (*Salpichroa originafolia* and *Nassella neesiana*). I would not have known how to identify them if not for advice at FOWSP and the *Nassella* especially would have got quickly out of control.

Unfortunately, contractors working for NBN have disturbed the area (even though they are obliged to work with Manningham Council in the presence of *Nassella*). I will now have to be especially vigilant to make sure it doesn't spread further as a consequence.

- done extensive planting where appropriate, using plants purchased from FOWSP,

- maintained and extended the areas of indigenous grasses and wildflowers, including with plants that I propagated from seeds I collected on the block. I would not have known how to do this without FOWSP. I have also identified some unusual indigenous plants that have emerged.

- most excitingly, observed, finally! the return of small birds to the garden. They are drawn to a small pond that I built and which I planted with coverage suitable for small birds. I'm waiting keenly for frogs to join them. Prior to this, the larger birds dominated.

What the Victorian government can do to assist projects such as mine:

- provide solid, ongoing financial support for groups like FOWSP

- help councils protect privately-owned remnant vegetation

- strongly encourage anyone moving into such an area to be educated in their environment and provide significant incentives for them to maintain it

- put in stronger controls so that businesses such as NBN do not contribute to the spread of weeds and destruction of indigenous vegetation.

Jeff Cranston

Currawong Bush Park & Mullum Mullum Linear Park, Warrandyte / Doncaster East

Since having moved to Doncaster East over 12 years ago, I have frequently gone walking in the section of Mullum Mullum Linear Park between Reynolds Road and Warrandyte Road and in Currawong Bush Park on the other side of Mullum Mullum Creek.

Currawong Bush Park and the adjacent section of Mullum Mullum Linear Park together comprise an 86-hectare area of remnant native bushland with numerous species of native flora and fauna. Manna gums (*Eucalyptus viminalis*) are dominant but there are various other tree species - eucalypts, acacias, etc. Eastern grey kangaroos (*Macropus giganteus*) are a common sight; less common are black wallabies (*Wallabia bicolor*).

I understand that koalas (*Phascolarctos cinereus*) used to be seen in the area but to my knowledge there have been no recent sightings.

In the last two years or so, I have noticed in the vicinity of Mullum Mullum Creek increasing numbers of eucalypts which have either died or have completely fallen over, roots and all. In other cases, trunks or large branches have broken off, especially due to very strong winds.

Earlier this year, a section of the Mullum Mullum Linear Trail was closed off with signage warning of dangerous trees. Numerous trees were the felled, apparently because they were dead, dying or hazardous.

It is submitted that the committee should examine the causes of tree deaths and failures in this important area of remnant bushland, and how these losses might be avoided in future. The Manningham City Council, which manages the parks, is no doubt very familiar with this problem and should be able to make a vital contribution to the inquiry.

In examining the causes of such tree losses, the committee should investigate the possibility that climate change is a significant contributing factor, including by reason of extreme dryness during droughts combined with saturation of the soil at other times due to heavy rains.

Other issues relating to ecosystem decline in the area should also be considered, including the impacts of (a) traffic noise (especially from Reynolds Road), (b) invasive weeds, and (c) pests like rabbits, foxes and feral animals (cats and dogs).

Marisa Matthys

Johansens Rd, Warrandyte South

My husband and I walked through the State Forest recently and were shocked at the degradation of the land. Everywhere we stepped trees had been felled by deer. We walked in the park along Johansens Rd, Warrandyte South. There is no green undergrowth just hard trodden land. Each night we have to be careful to avoid hitting deer on our way home from work. One small section has been fenced off which appears completely lush and different to the remainder of the State Park. I worry also about fire as the dead wood and fallen trees are just left strewn ready to burn.

Please protect our native trees, land and animals.

Blue Finger Orchid, Cyanulica caerulea, becoming rare, Fourth Hill, Warrandyte.



Elise Berry

Osborne Peninsula, North Warrandyte

(originally addressed to Councillor Jane Ashton, Nillumbik Council)

I am writing to express my immense disappointment and frustration at the lack of action being taken to address the issue of feral deer destroying our precious environment, both in the bushland and on private land.

Returning from a walk along the Osborne Peninsula in North Warrandyte, I despaired at the devastating damage done by deer that roam along this Yarra River corridor. What were once beautiful, bushy displays of indigenous vegetation planted by the local Osborne Landcare group, have now been reduced to leafless stalks and dead shrubbery. These are areas that have taken countless hours to plant, water, weed and nurture. Some parts of the Osborne Peninsula that struggled through the recent drought were just coming back to life but are now unrecognisable.

I understand that the Nillumbik Shire Council is planning to run a three-year trial project to explore how deer can be effectively controlled. Can you please ensure that North Warrandyte is added to the list of areas beyond the current areas of the Christmas Hills, Watsons Creek and Bend of Islands, as we are also being significantly impacted by the explosion in deer numbers.

Yarra River at Jumping Creek



Anon.

Pound Bend, Fourth Hill, Anderson's Creek, Mt Lofty, Black Flat areas of Warrandyte State Park

I have lived in Warrandyte for only 28 years and have been aware of the ecosystem decline in the area over this time. My main concern is the damage caused by deer in the State Park, along roadsides & on private property. Numerous deer tracks & scratchings are causing erosion & damage to vegetation. I recognise that this damage is extensive in the following locations:

- slopes above the Yarra around Pound Bend. Very steep slopes have multiple deer tracks which have severely disturbed the soil & vegetation, making it prone to severe erosion. Such erosion impacts the Yarra & ultimately Port Phillip Bay. Let's keep it clean!
- Fourth Hill, particularly on the southern slopes where damage is compounded by bicycle bush tracks;
- Gold Memorial Road area along Anderson's Creek;
- Mt Lofty area;
- Black Flat area of the State Park.

Native orchids & herbaceous plants have all but disappeared as they are browsed on by deer. Undergrowth has definitely been thinned due to browsing & bare patches of soil are evident where deer scratch & settle. Weed seeds are spread by the deer & impacts indigenous plants, further degrading the local ecosystem.

Deer have steadily moved down the Yarra valley from the Yarra Ranges & have been seen far down the river valley at Alphington. I have contacted the ranger about deer eradication & understand there are legislative restrictions which prohibit shooting deer in built-up areas. What I do NOT comprehend is the protection of feral deer under the Wildlife Act 1975. The Act states that deer "...are to be managed sustainably...". I would suggest that deer are NOT being "managed" at all, but are permitted to breed & browse along the Yarra valley at will. This is to the detriment of our native flora. Native animals are left with an environment depleted of food & shelter. As I go on my walks in Warrandyte I now see more deer than native wildlife.

Time to change the legislation!

I would certainly support stronger regulation to ensure fewer indigenous trees are removed from the Warrandyte area. Landholders appear to have little restraint from Manningham & Nillumbik Councils when they plan to remove indigenous vegetation, particularly if they wish to build on that land.

Additional funding is definitely required to assist in managing the ecosystem decline in many areas of Victoria. We have lost so much important habitat already due to drought, fire and human intervention. Our unique wildlife species are disappearing rapidly. I think it's time to stop, take stock & try to amend some of the failures of past action (or inaction)! Time for the government to truly listen to the experts, make appropriate decisions to repair damage to our ecosystem & be accountable for their decisions.

No doubt these issues have been commented on by others in the community, but I would like my opinions to be registered.

Doreen (Dee) Burge

Pound Rd, Warrandyte

Having lived in Warrandyte for over 40 years I've certainly noticed a change in the environment but perhaps don't have the knowledge to articulate this in a submission. I'd like to offer a comment for inclusion in FOWSP's submission. The major thing I've noticed is the proliferation of red box – I love them, but they have certainly taken over. When we bought our block of land near the top of the ridge off Pound Road it had both red box and long-leaved box on it. Now I don't think any long-leaved box have survived. We live opposite a section of the wildflower reserve, where we walk frequently, and from observation over the years most, if not all, of the long-leaved box there have died. We used to get koalas in the long-leaved box, but haven't had any around for years. Thank you for advocating for our beautiful Warrandyte bushland.

Don Vincent

Yarra River Environs and Fourth Hill, Warrandyte

I have lived in the Warrandyte area for over 12 years and observed the continual decline in the ecosystem, especially biodiversity, in that period. I am a volunteer with FOWSP, with my attention directed towards the Activity Group in the State Park, which assesses areas requiring attention and works to remove invasive plant species, and plant, nurture and protect once-common as well as rarer indigenous plants.

A few observations:

- 12 years ago, Koalas were a regular sight, and also heard, when walking along the river at Warrandyte, in the Fourth Hill area and in nearby residential areas. Since that time, koalas have ceased to be present, and I haven't heard or seen a koala in the Warrandyte area for over seven years. The reasons I attribute to: the loss of large Manna gums along the river due to people traffic and reducing rainfall; removal of trees on private property to enable building development; increased property fencing and more dogs; and increased road traffic. Other species such as Wombat, Echidna, and Black-tailed Wallaby are suffering to a lesser but very noticeable degree and for the same reasons.
- An alarming reduction in native terrestrial orchids. 12 years ago on Fourth Hill, it was not unusual to find areas of *Pterostylis nutans* Nodding Greenhoods, numbering in the thousands. I have not seen patches like this for some years, and one patch has not had any of these orchids evident for 3 years. The patch has been overtaken by invasive weeds, millipedes and is trampled by deer. Similarly, I have observed other orchids have reduced in numbers between an estimated 70 and 90%, including for example *Diuris pardina* Leopard Orchid, *Corybas incurvus* Slaty Helmet Orchid, and *Calochilus robertsonii* Purple Beard Orchid, various *Thelymitra* Sun Orchid species, and many others. More concerning is the almost complete disappearance from the region of rarer *Thelymitra ixioides* Spotted Sun Orchid, and *Lyperanthus suaveolens* Brown Beaks, among others.
- Gradual decline in the range of trees, with key species such as *Eucalyptus baxteri* Brown Stringybark, *Eucalyptus viminalis* Manna Gum and *Eucalyptus rubida* Candlebark suffering loss of leaf cover, dying and falling over in storms. Tree ferns which were present in the gullies on Fourth Hill are now absent. All these declines are reducing nesting and feeding sites for a wide range of birds as well as possums, gliders and bats. Young trees are not replacing these older trees, with a consequent thinning of these species and their replacement with more invasive *Kunzea Ercioides* Burgan, *Acacia dealbata* Silver Wattle and introduced grasses and woody weeds such as Cape Broom, *Pittosporum* and *Polygala*.

Underlying the obvious observed losses outlined above are a range of less evident declines – in insects especially native pollinators, and in the mycelium or fungi that support and co-exist with the plants and animals. The decline in one element unbalances the whole ecosystem.

The loss or reduction of all these species of flora and fauna, of which I have only outlined a few examples, is distressing and seemingly hopeless. Our efforts at FOWSP to remove invasive plant species and plant, nurture and protect once-common as well as rarer indigenous trees, shrubs and grasses is a constant battle against the inexorable environmental decline and invasive plants and animals (and regrettably, deliberate damage by humans). The negative impact on the community's wellbeing is noticeable, at least those in the community concerned about the environment.

This massive step-change in ecosystem decline over such a short period appears to align with dramatic changes to our overall climate, including reduced rainfall, increased heat, more intense

storms and bushfires. Accelerating this are increased land development and land clearing, population pressures, invasive species, and the progressive loss of environmental capability in our environmental agencies and the resources available to them.

Many actions are required to arrest, or at least slow, ecosystem decline, and hopefully reverse it where possible. These include actions at all levels of government, and some are outlined below:

At federal level:

- Commitment to net zero greenhouse emissions by 2050 at the latest, along with advocating for global change on carbon emissions and ecosystem decline.
- Strengthening of the Environmental Protection and Biodiversity Act and other environmental legislation to protect and sustain our natural environment, supported by adequate resources to enable this to occur.
- With the states, build a national strike force for bushfires (at a small fraction of the cost of fighter planes and submarines) of planes, helicopters and people to respond immediately and forcefully to suppress fires when they occur and prevent them becoming national disasters as occurred in Spring/Summer 2019/20.

At state level:

- Strengthen environmental legislation in line with the above actions at federal level, including ceasing land clearing, reversing degradation of land and waterways, and the clear and unequivocal protection of threatened species.
- Develop, implement and resource a plan to expand and resource our national and state parks, based on priorities of protecting threatened species and ecosystems, and expand wildlife corridors with incentives for landholders.
- Work with indigenous groups on improving our means of environmental protection, management and sustainment, including the use of fire to restore and sustain natural environments and assist bushfire control.
- Increase efforts to control feral pest and plant species, especially deer (which require a long-term commitment to reduce their numbers significantly and maintain control), horses, pigs, and foxes, as well as invasive weeds.
- Increase support for volunteer groups that contribute significantly to environmental protection efforts across the state, including LandCare, 'Friends of' groups and others.

At local government level:

- Respecting the regional planning schemes to reduce land development and land clearing in the Green Wedge. This would include strict environmental controls over any new development, as well as the prohibition of soil fill dumping.
- Increased incentives for Land for Wildlife.
- Increased local control of invasive plant species.
- Support and resource state-level efforts as outlined above.