

# SUPPORTER IMPACT REPORT 2024

Working together to protect habitat and biodiversity



We acknowledge the Wurundjeri people of the Kulin Nations as the Traditional Owners of the land on which Round the Bend Conservation Cooperative stands. We respectfully recognise Elders both past and present and endeavour to demonstrate this respect by managing this unique land and protecting its integrity.

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Cover image: Tawny Frogmouth and fledgling

Above: Emerging stage of Red Scratcher cicada (Popplepsalta rubristrigata)

# WELCOME

We would like to acknowledge and thank you, the funding bodies, donors and Patrons who continue to support our work in helping to protect and enhance the bio-diversity of our 132 hectares of native bush, home to Powerful owls, Brush-tailed phascogales and many other important and endangered species of plant and animal life.

Through the commitment of our members and your financial support we maintain and improve an area that is now considered of exceptional local and regional biodiversity.

Members contribute through annual levies and by volunteering their time for activities such as weeding, planting, monitoring cameras, checking exclusion plots and guarding plants.

Your contributions go solely towards our conservation work, including enabling us to employ contractors to perform some of the more challenging tasks which are beyond the capabilities of our members.

Thank you for sharing our vision.



Image: Powerful Owl, Ninox strenua

# BIODIVERSITY

This edition of our Supporter Impact Report provides more examples of the value of your support for our work conserving the biodiversity of this bushland.

The stories you'll read in this report that summarises our conservation activities and achievements are a tribute to our combined efforts, but they are not the whole story.

Our research into the individual animals and plants that thrive in our bushland is important to understand their range and distribution, their needs and threats. Taken individually, this is important information, especially for vulnerable or endangered species. That Superb Lyrebirds and White-throated Nightjars are breeding here illustrates what amazing biodiversity we have in our midst and the importance of our conservation work.

But if you peel back the layers of what individual plants and animals contribute to our ecosystem, you realise that their importance goes well beyond their own intrinsic value. They each interact with, and contribute to, the enrichment of our ecosystem. The Superb Lyrebird, for example, makes a major contribution towards soil enrichment, which in turn benefits other flora and fauna.

The loss of any one of these animals removes another intricate 'moving part' in what is our very complex biodiversity and reduces the resilience of our ecosystem. By supporting the work of the Co-op you are working towards protecting biodiversity, allowing for the recovery of rare species, and protecting the habitats of common species – to make sure they stay common in the future.

Image: Golden Moths orchid (Diuris chryseopsis) last recorded on the Co-op in the 1980s

# **ACTIVITIES**

## Work parties

It's been another year of holding back the tide of weeds and of protecting priority native species. With only one work party cancelled due to high wind, we managed to complete eleven work parties. They have been well attended by Members (old and new) with Friends and new residents bolstering our capacity. We have tackled our various tasks with good-natured enthusiasm and an increasing knowledge bank.

## Leadership

This year, different Members are taking responsibility for specific areas of activity, so work parties have different leaders depending on the focus: perennial weeds and grasses; plantings and exclusion plots for threatened species; Burgan control; orchids & guarding of recruit plants; woody weeds, blackberries & thistles; Melbourne Water liaison and mapping.



#### Weeds

On the weed front we've had some successes. Over the past few years, we've pulled thousands of thistles and hundreds of blackberries in the gullies and along the Co-op boundaries and as a result the numbers are currently low, but this requires consistent monitoring.

With the recent wet winters, however, Sweet Vernal grass has been a major focus as it attempts to invade our best areas. With a combination of professional contractors, work parties and additional volunteer work by residents we are 'holding the line' on this less appreciated resident.

Round-leaf Pomaderris (Pomaderris vacciniifolia)

## Protecting rare plants

Several work parties were devoted to constructing exclusion plots to protect rarer plants such as Roundleaf Pomaderris (Pomaderris vacciniifolia), Large-leaf Bush-pea (Pultenaea daphnoides) and Clustered everlasting (Chrysocephalum semipapposum).

Single plants in individual guards that have successfully seeded now require larger enclosures to allow the seedlings to mature without grazing pressure.



Large-leaf Bush-pea



Constructing exclusion plots

## Nest box monitoring

The monitoring of the Co-op's 26 nest boxes has continued through the year, adding to our four years of data.

Short-term use of the nest boxes by Sugar gliders and Brush-tailed phascogales is a continuing pattern and indicates that they regularly change sites and most likely have plenty of natural nesting sites as alternatives.

The most significant trend this year has been the overall decline in the use of the nest boxes. This has been accompanied by a reduced incidence of anecdotal sightings, particularly of phascogales. However, they continue to utilise roof cavities of several houses, and other locations.



A Sugar glider family in a nest box and a phascogale investigating one.

## Phascogale monitoring

Early in 2024 we commenced a collaboration with Melbourne Water and Nillumbik Shire Council to co-ordinate studies of Brush-tailed phascogales on the Co-op and adjacent Melbourne Water land. The first monitoring program conducted over two weeks in May did not yield many sightings on the Co-op compared with sightings on Melbourne Water land, though subsequent more limited trials have yielded more frequent sightings. One trial site in November and December had a variety of visitors including Brush-tailed possums, Ring-tailed possums, Sugar gliders, White-browed tree creepers, and Pied Currawongs as well as phascogales.

Additional monitoring techniques are being developed to expand our knowledge of phascogale numbers. Worthy of a special mention are the nightly images we are receiving of the family of phascogales that nest in a resident's roof, an activity that has persisted for many years.



A phascogale at a bait station and one in a roof cavity.

## Fox control

Fox predation threatens many pf our native species, in particular groundnesting birds like Superb Lyrebirds and White-throated Nightjars, and ground-foraging mammals like Phascogales.

Canid Pest Ejector (CPE) trials, to augment our soft jaw trapping, has facilitated an expanded fox control program and the elimination of at least two foxes in 2024. Further CPE trials are planned for 2025 but may be scaled-back to focus on only those locations where we are seeing a regular fox presence.

During the Spring and early Summer of 2024 we used camera traps to monitor fox traffic and have had very few fox sightings. While this is a heartening sign, it is too early to have any confidence that this is more than a 'dip' in their presence, and not a long-term reflection of our fox control efforts to date. With the recent addition of nine new camera traps, we have been able to increase our monitoring of fox traffic during the period from October to December, which enables us to optimise our placement of both CPEs and soft jaw traps.



# **NEW INITIATIVES**

## **Q1** FAUNA MONITORING GROUP.

To complement our long-term monitoring programs, we have established a WhatsApp group for incidental sightings of mammals and for other notable nature observations. This information will be logged to help build a database of the range of animals that are such an important part of our environment.

## 02 SPOTLIGHTING

Monthly spot-lighting sessions are being held at different locations on the Co-op, checking potential natural nesting sites with a thermal imaging camera. Popular with residents, these excursions not only engage members and residents in observing the after-dark activities of the birds and animals we share this habitat with, but also build data on observations.

## O3 CITIZEN SCIENCE.

Lachie McBurney, Nillumbik Shire Council Biodiversity Officer made an engrossing presentation on citizen science at our AGM, highlighting the role the Co-op is playing in contributing to the pool of knowledge that underpins the Shire's Biodiversity Strategy and the essential role organisations such as ours play.



## **04** BIO-ACOUSTIC RECORDERS

Bio-acoustic recorders are devices that record the sounds of the bush. They can capture hundreds of hours of data that can be processed using emergent bio-acoustic analysis tools. Together this technology can help build data on the presence and behaviour of a range of species.

One such target species is the White-throated Nightjar, a regular Summer visitor from PNG and Northern Australia, coming here to breed. This year the birds arrived on the 6th October. For several years we have had a What's App group dedicated to logging the times and general locations of their distinctive calls, through which we are able to monitor their arrival, departure and general proximity. Sightings are very rare, because of their remarkable camouflage and very cryptic nature.

Our human ears are good at detecting the proximity, direction and movement of a sound source. However, set to record throughout the night, our bio-acoustic recorders can provide much more comprehensive data on the presence and habits of the Nightjars in our area. Once our recordings are run through AI programs such as Arbimon, the calls of White-throated Nightjars can be identified via a unique audio 'finger print'. The AI is improving rapidly and we expect that in coming years we will be able to apply bio-acoustic analysis to a broader range of species and conservation purposes.

Thanks to Nillumbik Shire Council and Wildlife of the Central Highlands (WOTCH) for lending us their Song Meters for this season's monitoring.





# **ACHIEVEMENTS**

## New species recorded

Many new species were recorded for the first time in 2024 including over 100 new moths. Here are just some of them:

Beaded lacewing, Stenobiella pindana
Mantis lacewing, Toolida infrequens
Lacewing Stenolysmus extraneus
Forest Splendid Ghost moth, Aenetus eximia
Micro lacewing, Coniopteryx maculithorax
Broad-leaved Sun-orchid, Thelymitra Latifolia
Clicking Ambertail cicada, Yoyetta robertsonae
Fiery Skimmer dragonfly, Orthetrum villosovittatum



The Co-op lacewing list now totals 50+ species and the moth list totals 620+ species.







Top: Fiery Skimmer dragonfly Above, left to right: Broad-leaved Sun-orchid; Clicking Ambertail cicada; Forest Splendid Ghost moth

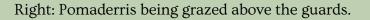


Finding moths.

## Recruiting Round-leaf Pomaderris

In 2018 Nillumbik Shire Council provided us with seedlings of the threatened Round-leaf Pomaderris (Pomaderris vacciniifolia). We planted 35 of these in seven groups of five, located in damp gullies, with each plant protected by a mesh guard.

The plants grew well but any growth above the guard was being severely grazed by deer, so this year we erected exclusion plots to encompass all surviving plants. We have now recorded a good number of recruit plants growing in the exclusion plots and we will monitor the development of these.







## Lyrebird breeding success

As in previous years, several males were heard actively calling from mounds in areas near the east end of the Co-op throughout the Winter. A new nest was built in 2024, the third in a small area on Stevenson Creek since 2020. This nest was monitored with a 4G motion camera which revealed that a chick was successfully raised.

This is a significant and exciting event; a further step in the establishment of lyrebirds in our area following a 38 year absence after the 1962 fires.

The Superb lyrebird is an ecosystem "engineer" owing to the immense volume of soil that it turns over when foraging. This creates habitat for invertebrates and microbes that would not exist in the birds' absence and may also benefit other biota like fungi and macroinvertebrates.



# **NEWS**

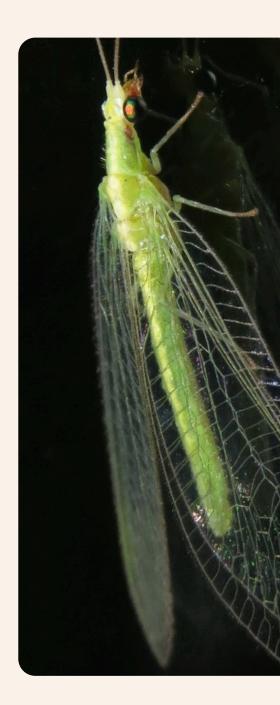
## IS THIS A NEW SPECIES?

This Green lacewing in the genus Chrysoperla was recorded on 30th May. The current literature has only one species of this Genus recorded in Australia: Chrysoperla congrua.

The eight Australian records of C. congrua on iNaturalist are all in the tropical or subtropical climate zone. Our specimen, recorded 30km NE of Melbourne, is a thousand kilometers further south, in the temperate zone. This climate differential increases the possibility of the specimen being a different species.

The specimen was collected and sent to Museum Victoria. Unfortunately, the specimen can not currently be identified to species level, even after some amazing detailed microscopic photography. Dr Ken Walker of MV has advised that 'the best way to resolve this issue is to await until someone conducts a molecular phylogenetic revision of either the world or Australian fauna of Chrysoperla – well suited for a PhD'.

Hopefully a future identification to species level, will reveal a new species for Victoria, or even for Australia.



## EASTERN ROSELLAS

The tree, where the Rosellas bred from 2016 to 2022 fell in 2023 and no breeding activity was recorded that year.

In 2024 the birds started attending a hollow in another tree in the area and a motion camera was installed to monitor activity.

The birds were observed mating close to the hollow and the female spent some time in the hollow for a couple of weeks. The motion camera showed that a pair of Ring-tail possums visited the hollow six nights in a row commencing on the night of 6th November, and that the Rosellas last visited the hollow on the morning of 7th November.

The hollow was subsequently checked and fragments of eggshell were distributed at the base of the hollow. From this data it is apparent that the Rosellas had commenced laying. The eggs were predated by the Ring-tails and the Rosellas then abandoned the hollow. Sugar gliders had predated in some previous years, but this was the first predation recorded by Ring-tail possums.





Eastern Rosella at nesting site and shell fragments of the predated eggs.

## HABITAT FOREVER

In 2024 we applied to place a Trust for Nature Conservation Covenant on our property. As of December 2024 we are awaiting the final ratification by the Trust for Nature Board and the Victorian Government. We anticipate completion of the process early in 2025.

The values espoused by Trust for Nature align very closely with ours. By placing this Covenant on the title of the property we can ensure our conservation work is protected by law. As part of the Trust for Nature network we will also have exposure to a pool of like-minded people and organisations who may wish to support us as members, patrons, or financial contributors. We look forward to working closely with Trust for Nature into the future.



Corinne Proske, Trust for Nature CEO (4th from right), and Andrew Brookes, Chair of the Trust for Nature Board (2nd from right) with Co-op Members.

## **FUNDING**

We have been very fortunate to receive funding from several sources this year, 100% of which has gone towards our important conservation work. These organisations, agencies and people are helping us to protect unique habitat for future generations.

#### WARRANDYTE COMMUNITY BANK

Warrandyte Community Bank has funded additional monitoring cameras which will facilitate current and new fauna projects, including fox control. Their support of our activities demonstrates their growing appreciation of the importance of the conservation of our biodiversity as a major benefit to the wider community.

#### MELBOURNE WATER

Melbourne Water again provided funding from their Liveable Communities Liveable Waterways program for weed control of Stevenson Creek on our northern boundary. This ongoing project is successfully controlling the weeds in this biodiversity hotpost in the Kinglake Yarra habitat corridor, as recognised in the Yarra Strategic Plan.

#### NILLUMBIK SHIRE COUNCIL

Nillumbik Shire Council provided a grant for our fox control trial and also funded a third of the cost of our ongoing perennial grass weed project which is strategically focussed on preventing Sweet Vernal, Briza and Ehrharta invading our key areas of highest biodiversity.

#### PHILANTHROPIC SUPPORT

A third of the cost of our ongoing perennial grass weed project was also funded through generous philanthropic support

## **GALLERY**



Bassian thrush; Blue Pin Cushion (Brunonia australis); Crane fly (Leptotarsus imperatorius); White-fingers (Caladenia catenata); Stag beetle (Lamprima Aurata); Wombat; Chocolate lily (Arthropodium strictum s.s.); Trim greenhoods (Pterostylis concinna); Superb fairywren.

## **OUR TEAM**

Many people contribute to the success of the Co-op's conservation work: Members, Associates, Friends of the Co-op and residents. Everyone has a role to play in this work, whether by participating in work parties, undertaking administrative and governance roles, writing grant applications, joining a working group or by simply living lightly on the land.

## **BOARD OF DIRECTORS**

Neill Kamminga (Chair), Caroline Kardachi, Richard Laurie (work party coordinator), Amy Callinan, Murray Paternoster, Lynne Johnstone, Colin Devenish

## FLORA GROUP

Neill Kamminga (Convenor); Doug Hilton (deputy convenor),
Richard Laurie (perennial weeds; grasses); Rowena Groundwater
(threatened species); Murray Paternoster & Alana Duncan (Burgan), Chris
Pierce (orchids & guarding recruits); Felicity Law (Melbourne Water liaison
& mapping; assisted by Aawa White); Duncan Sadler (Woody weeds,
blackberries & thistles; assisted by David Keir).

## FAUNA GROUP

John Roberts (Convenor); Lynne, Johnstone, Murray Paternoster, Alana Duncan, Pierre Noirjean, Kay Hawkins, Duncan Sadler, Erica Palatinus, Felicity Law, Aawa White, David Keir, Jake McKenzie.



# ROUND THE BEND CONSERVATION CO-OPERATIVE

Member: Bend of Islands Conservation Association

## **PATRONS**

Anitra Nelson Jenny Neale Mel Keely & Kirk Anderson

## **SUPPORTERS**

Nillumbik Shire Council

Melbourne Water

Community Bank Warrandyte

Anonymous philanthropic donor

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