Lorne Cockatoo-proof bin Mechanism Trial

EVALUATION REPORT | JULY 2023





Council has been dealing with cockatoo-related issues in Lorne since 2009 when complaints were received that cockatoos were pestering customers for food at alfresco dining areas. Residents also reported that cockatoos were spreading rubbish in parks and streets as they scavenged in litter bins.

The issue worsened as residents and visitors across Lorne started feeding birds, either by leaving out birdseed mix, or handfeeding directly. This saw cockatoos become more dependent on people for food, and also poses health risks. Setting up backyard feeding stations can easily transmit diseases between birds like Beak and Feather Disease, which is untreatable and fatal. There are also health risks to people as bird faeces may contain harmful bacteria and viruses.

With increasing reports of cockatoos opening kerbside landfill bins and causing litter issues, Council started fitting bin locks to landfill bins in 2016, and have trialled a number of options since then with mixed success. Residents have also been fitting homemade solutions to kerbside bins, many of which pose a risk to contractors and community during the collection process.

In late 2022, Council developed an action plan focussing on stopping cockatoos from opening residential kerbside bins. The plan used a three-prong approach:

- education and community awareness:
- education and enforcement for bins being left out for extended periods; and
- trials of mechanisms to lock kerbside bins.

The Lorne community also has an important role to play in locking cockatoos out of kerbside bins. This includes sorting household waste correctly, not overfilling bins, using bin locks/mechanisms where provided, and placing bins on kerbsides within permitted timeframes. Other stakeholders, such as businesses and holiday rental providers must also support the program by discouraging customers and short-stay visitors from feeding cockatoos.

While Council's action plan focussed on issues relating to kerbside bins and litter, there is a broader issue around the management of cockatoos in Lorne that is beyond Council. The Department of Energy, Environment and Climate Action (DEECA) is the authority responsible for the management of cockatoos in Victoria.

All Victorian wildlife, including cockatoos are protected under the Wildlife Act 1975, and it is illegal to harass or harm cockatoos without permission from DEECA.

Community engagement

A comprehensive community engagement program was completed during the bin lock trial and used direct mail, newspaper advertising, social media, and a dedicated webpage to provide project updates.

A cockatoo forum was held in January 2023 with presentations from a wildlife consultant discussing cockatoo habits and behaviours, three mechanism designers, and Council's Litter Prevention Officer and waste management team. Around 35 people attended the forum, which was livestreamed to a small audience via Facebook and Instagram.

Education and enforcement of Community Amenity Local Law

In October 2022, Council appointed a Litter Prevention Officer (LPO) to educate residents about timeframes for bin collection, and if required, enforce the timeframes permitted in the Community Amenity Local Law.

The LPO conducts weekly street patrols to identify bins left on the kerbside and implements a three-step process with property owners.

From 1 December 2022 to 30 June 2023. the LPO issued:

- 159 courtesy letters for first offence of leaving bin on the kerbside.
- 33 Notices to Comply for second offence of leaving bin on the kerbside
- 6 penalty notices for third offence of leaving bin on the kerbside

TRIAL OF BIN LOCKS AND **MECHANISMS**

The trial of nine different locks and mechanisms ran from December 2022 through to 30 June 2023.



1. BIN APRON

Moulded plastic lid that extends over the lip of the bin body and eliminates a ledge for the cockatoos to stand on. Developed by the Lorne Men's Shed. 10 x Bin Apron prototypes fitted to bins by volunteers from the Men's Shed were included in the trial. Manufacturing difficulties prevented inclusion of more Bin Aprons in the trial.



2. BINM8

Stainless steel mechanism featuring two large springs that apply constant pressure to keep the bin lid closed. The lid opens completely when the bin is emptied into the truck, ensuring no light-weight rubbish is trapped in the bin. Developed in partnership with Surf Coast Council.



3. BIN SPRING

Commercially available stainless steel clip that sits on the bin handle and presses against the lid. The lid automatically opens when the bin is tipped into the truck. A plastic cable tie stops the Bin Spring from falling into the truck during the emptying process.



4. FLY AWAY

A self-release catch that opens when the bin is emptied into the truck. A galvanised spring rod extends from the rear of the bin over the lid and attaches under the front edge of the bin. The Fly Away needs to be re-engaged after the bin is emptied. Three different versions were tested.



5. LID WEIGHTS

A wooden block secured inside the bin lid. which makes the lid too heavy for cockatoos to lift and flip open. Various weights were trialled to determine the optimum weight to prevent cockatoo access.



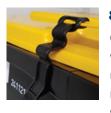
6. LITTER LOCK

A plastic moulded clip with a long arm extending down the side of bin. A hinge attached to the bin body holds the arm in place. The clip releases from the bin lid when the arm of the collection truck clasps the bin. Developed locally in partnership with Surf Coast Council.



7. OVERSIZED LID

Installation of a 240-litre lid onto 120-litre bin body. Handles on bin lid are removed so cockatoos can't grab onto them and fly to open the lid.



8. SAFEWASTE STRAP

Commercially available rubber strap that wraps around the bin lid handle and hooks under the side of the bin body. The strap releases when the bin is inverted and the weight of the waste pushes against the lid.



9. SECURE-A-LID

Commercially available plastic latch that uses gravity to release and automatically unlock when the bin is lifted and tilted by the collection truck. The mechanism can be released to open the lid by lifting the lever.

More than 500 bins were fitted with locks or mechanisms as follows:

Mechanism	Total # Installed (Lorne)	Installation dates		
Bin Apron	10	October 2021		
BinM8	84	June – August 2023		
Bin Spring	40	June 2023		
Fly Away#	67	December 2022		
Lid Weight#	31	June 2022		
Litter Lock	198	Dec 2022 – Feb 2023		
Oversized lid#	14	June 2022		
SafeWaste Rubber Strap#	8*	Prior to 2020		
Secure-a-Lid#	125**	Nov 2021 – Dec 2022		
TOTAL	577			

^{*}SafeWaste straps had previously been fitted to all landfill bins in Lorne during bulk lid changes to comply with AS 4123 colour standards.

Bin collection truck drivers made the following observations:

Bins fitted with Litter Locks need sufficient space (minimum 50cm) between bins to ensure the arm of the truck can deactivate the latch.

Bins fitted with mechanisms that relied on the weight of the bin contents to open the lid were unreliable. Bins with lightweight rubbish did not always open.

Community feedback

Residents were encouraged to provide feedback, with stickers requesting feedback applied to bin lids where trial locks and mechanisms were fitted from 1 December 2022. Only a small number of residents responded (total 18) up to 31 March 2023, so direct engagement via email was undertaken in April and June 2023. A response rate of 61% was achieved from the 269 emails sent to trial participants.



The following table shows the number of responses received for each trial lock/mechanism:

Bin Lock/Mechanism	Number of bins fitted with locks	Emails sent requesting feedback*	Number of responses received responses received	Positive feedback	Neutral	Issues reported
Bin Apron	10	10	7	7	0	0
Bin M8	84	35	13	11	1	1
Bin Spring	40	18	8	3	2	3
Fly Away**	67	59	44	27	3	14
Lid weight	31	17	7	2	1	4
Litter Lock	198	125	73	63	5	5
Oversized lid	14	5	5	2	0	3
Safe Waste rubber strap	8	0	1	1	0	0
Secure-a-Lid***	125	0	7	5	0	2
	577	269	165	121	12	32

^{*}Only properties where Council already had an email address on record were contacted. **This includes all feedback received on the three versions of the Fly Away. ***Seven properties (3 in Fairhaven, 4 in Lorne) provided feedback for the Secure-a-Lid. Lorne properties with Secure-a-Lids were not directly contacted for feedback, as previous evidence shows Lorne cockatoos are able to open this design.

^{** 150} x Secure-a-Lids were also fitted in Fairhaven/Aireys inlet.

[#] Mechanism was not successful in Lorne, or had design issues.

Evaluating the mechanisms

Trial mechanisms were evaluated on feedback and observations on the following criteria:

- Prevents cockatoos and other wildlife from opening bins
- Ease of use
- Does not cause undue stress on the bin
- Does not create unacceptable safety risks

- Automatically opens for a range of rubbish weights
- Quality and design of product
- Cost to purchase and install

The following table provides an overview of the evaluation outcome:

Good	Neutral / some concerns Not acceptable / did not work Further information required									
	Prevents cockatoos & other wildlife	Ease of use	Does not cause undue stress on the bin	Does not create unacceptable safety risks	Automatically opens for a range of rubbish weights	Quality & design of product	Cost to purchase and install (GST Excl)	Commercially available (Y/N)	Future roll-out (Y/N)	Comments
Bin Apron								No	ТВС	Yet to be trialled by Council. Lorne Men's Shed advised it performs well (based on trial of 10 prototypes).
Bin M8							\$<25 each + installation	Made to order	Yes. Priority for 120L & 240L bins	No negative feedback to date.
Bin spring							\$<15 each + installation	Yes	No	If cable tie not used they come off easily. Lid can't stay open while fitted so not user friendly in some circumstances.
Fly Away							Not supplied	No	No	Difficult to engage, so not suitable for holiday rentals. Issues with emptying and bin opening.
Lid weights	Only if sufficient weight is used						<\$10 each	No	No	High risk of damage to bins and property if lids breaks off during bin servicing.
Litter Lock	Some concerns on smaller bins						\$<20 each + installation	Made to order	Yes. Priority for 240L & 360L bins	Some concerns regarding use on 120Lt bins & lids flexing if lid lifted from opposite side.
Secure-a-Lid							\$<20each + installation	Yes	No	Not suitable for Lorne as cockatoos can open this latch.
Oversized lids							<\$20 each	No	No	Not successful for cockatoos.
Safe-Waste strap							<\$10 each	Yes	No	Not successful for cockatoos.

Recommendations:

At the conclusion of the trial and with consideration to all feedback, the following actions are recommended:

- Facilitate a joint community response to cockatoo management in Lorne with businesses, holiday accommodation providers, and Department of Energy, Environment and Climate Action (DEECA)
- Ongoing enforcement of Council's Local Amenity Law for bins being left out for extended periods.
- Developing an implementation program considering the following:
- Fitting mechanisms to landfill, recycle & FOGO bins in Lorne (5,350 bins).
- Using a combination of mechanisms, primarily BinM8 and Litter Locks.

The full evaluation report is available on request.

Contact Council on 5261 0600 or via email at info@surfcoast.vic.gov.au

- Schedule lock fittings from November 2023 to April 2024 (Monday & Tuesday only) when non-permanent Lorne residents are more likely to be in residence.
- Continue to monitor the effectiveness of each mechanism, and trial new mechanisms as they become available.
- Monitor other townships across Surf Coast Shire to determine if cockatoos become an issue that needs to be addressed.
- Continue advocacy to the Department of Energy, Environment and Climate Action (DEECA) to seek support in management of wildlife.

"This is a great innovation and totally solved our problem with cockatoos."

Peter, Tradewinds Avenue

"Fantastic! It has stopped the issue in its tracks. Thanks for your help."

Evan. Neade Street

"Love this lock. Feel secure not having to worry about when I put it out. Prior to lock fitted I would wait til late to put it out – sometimes forgetting!"

Janis, Howard Street

"The bin aprons work well due to the cockies having nowhere to sit while attempting to lever the lid open."

Bill, Dorman Street

"The oversize lid is fine unless it is a windy day, then it is blown open and the birds have easy access."

Judi, Armytage Street

"Spring is very effective. Defeated cockie's attempts."

Graham, Bay Street

"These bin latches are by far the best latches I have had installed. No issues with use and or having cockatoos access them."

John, Polwarth Road

