



LIGHT
REGIONAL
COUNCIL

Little Corella Management Plan 2016



AIM

The aim of this plan is to reduce the negative impacts that the Little Corellas are having on residents, wider community, infrastructure and vegetation within the Light Regional Council. Specifically the plan aims to reduce the future impacts the Little Corellas are having on the townships of Hewett, Kapunda, Roseworthy and Greenock.

While it would be considered impossible to totally eliminate Little Corellas from the landscape it is accepted that certain management strategies have yielded results in minimising the impacts of Little Corellas in populated areas. It is acknowledged that the management actions prescribed in this plan are likely to be successful in dispersing the species from the townships, potentially moving the flocks to other areas outside of township areas where they are likely to have less impact.

The broader scale problem is a matter for discussion with major stakeholders including Councils, LGA and the State Government and to consider options produced by the anticipated report by the University of South Australia on Little Corellas.

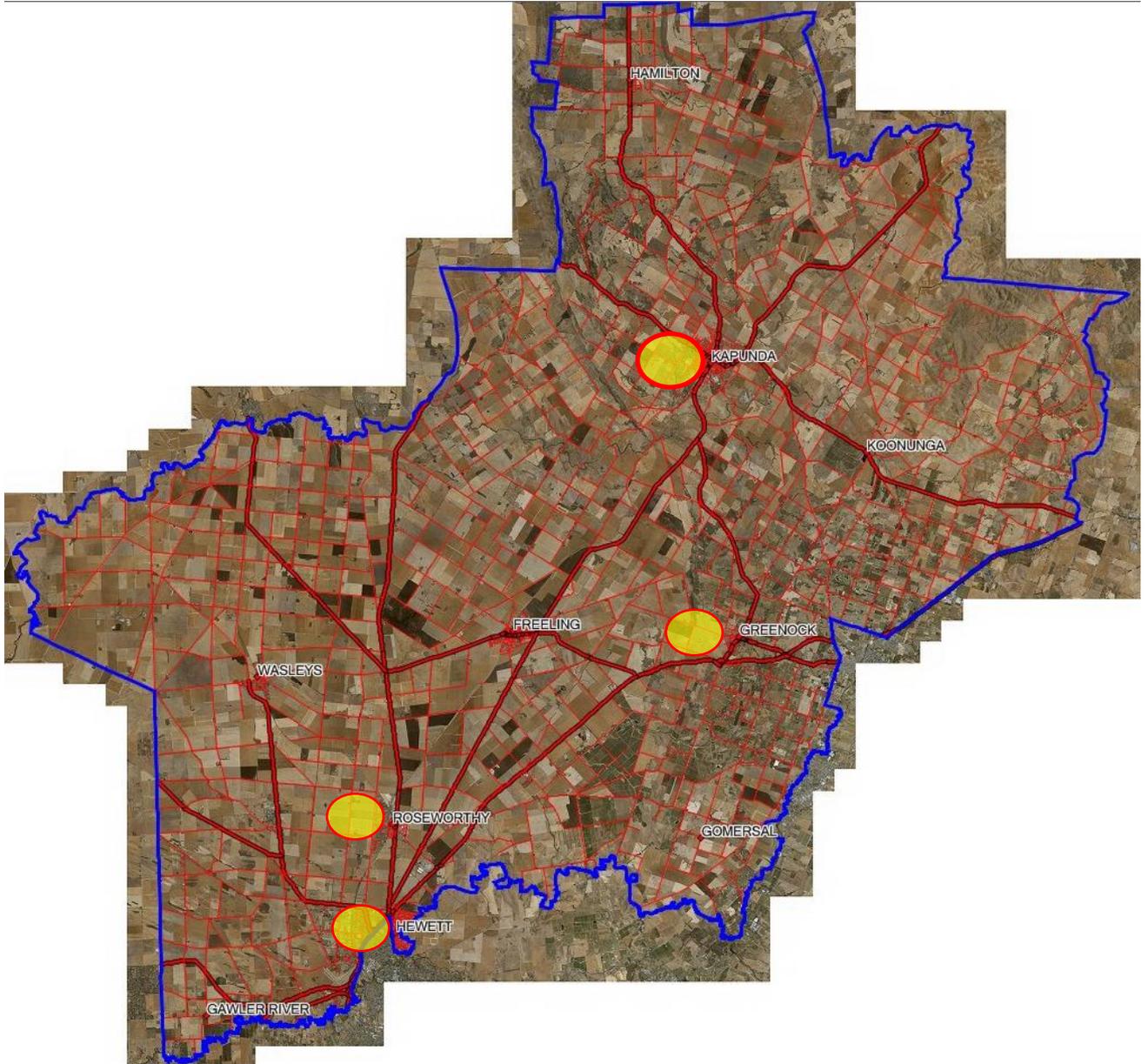
The Little Corella management plan will evolve as actions are trialled and new information becomes available.

BACKGROUND

Historically the Little Corella's southern range extent was north of the Flinders Ranges. Since the 1920's the range of the Little Corellas in South Australia has expanded substantially southward. The numbers of Little Corellas in the Light Regional Council area has increased significantly since the summer of 2014. The Little Corellas have been observed in large numbers in several townships within the region with numbers increasing significantly each year. It has been observed that flocks of Little Corellas have been sighted loafing in trees in Kapunda, Hewett, Roseworthy and Greenock where this has led to a number of problems reported by local residents.

Over the last two seasons the numbers of birds sighted in local township areas has increased significantly. There have been many attempts to manage the problem at a Council level in the past, but these have been piecemeal and limited, or yielding short term effect. Work carried out traditionally by Department of Environment, Water and Natural Resources (DEWNR) to remove eggs from nesting sites has declined over the years and has contributed to the increasing numbers of birds.

Many management strategies have been implemented by Councils with Little Corella problems. Through research it appears that only a handful of strategies have had any effect in discouraging the birds from settling in an area and only those strategies that have committed persistent resources have had any positive results.



 Reported Corella Activity

LITTLE CORELLA BEHAVIOUR

A typical daily activity pattern for Little Corellas is to start calling at first light. As the light grows birds begin to move about the roost trees and the calling intensifies. Birds often fly to the tops of exposed or dead trees to warm up and bask in the sun before moving away to feed. The birds will fly off to forage for food in a sown crop or pasture stubble. Birds will feed from 1- 5 hours before returning to trees to loaf, digest food, preen and play. Little Corellas will return to the evening roost site near sunset and are often noisy while settling to roost.

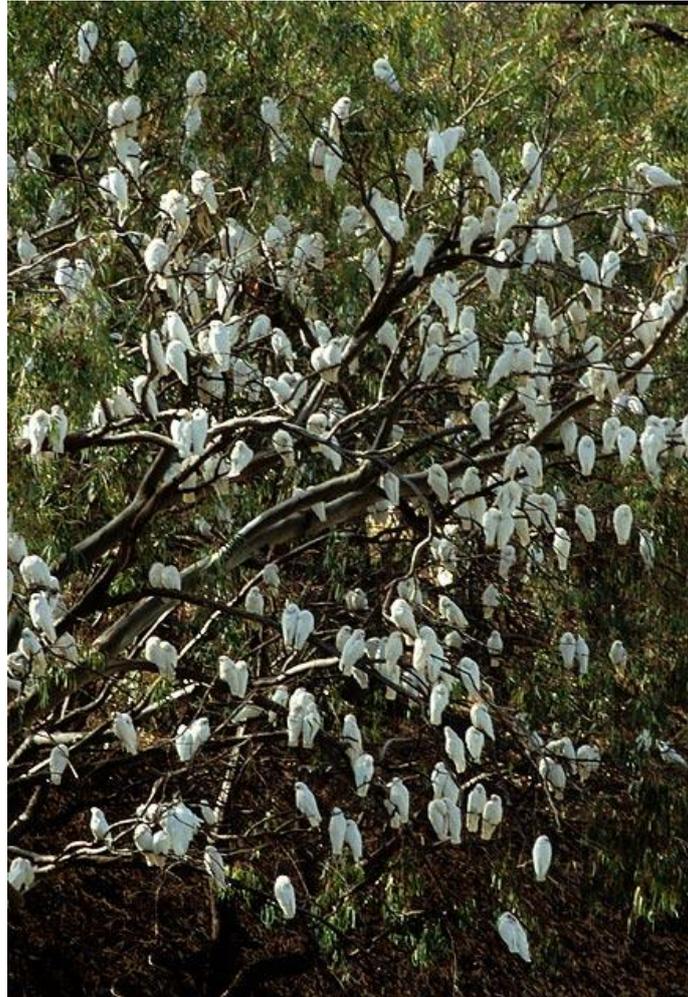
In addition to daily activity patterns there are seasonal activity patterns. These are influenced by food availability and breeding activities. During the spring birds will pair off to breed and usually disperse over the countryside. They will generally feed near their breeding place. After the young fledge (usually November) they will join growing flocks. This is generally when flocks form as they aggregate into larger flocks heading into the summer weather. The Little Corella's diet is based on plant food including a wide range of seeds, fruits, flowers, nuts, bulbs and corns. Little Corellas have learnt that many commercial crops provide a good source of food in the form of cereal grains.

The problems associated with Little Corellas vary significantly depending on location. One of the main problems reported to Council are, but not limited to, excessive noise, where large numbers of Corellas will periodically start calling en masse and fly about calling, this noise can be very distracting and disturbing to residents. Other nuisance reported has been damage to trees, damage to houses such as solar panels, wiring, hoses and roofing. Damage to public infrastructure such as street lighting has also been reported. Many trees within the region are in distress and wear the scars of Little Corellas where they have been stripped of foliage.

Little Corella damage is not restricted to physical damage and noise. Many native birds have been displaced by large numbers of Little Corellas invading areas normally inhabited by other species.

Aspects of the Little Corella's behaviour is the damage they cause and the way they use their beaks as a grasping tool, a chisel, pliers and a digging implement and in combination with their tongue, a fine instrument capable of husking tree branches. Little Corellas have been reported to Council for damage to buildings, aerials, lights fittings, wiring and digging up of newly laid turf on sporting grounds. This has a significant financial implication to Councils and residents.

The Little Corella is found in a large variety of environments, but always near permanent water. It is found on open plains, grasslands, sedge plains, saltbush, arid woodlands, coastal mangroves, cultivated farmlands, rocky ranges, woodlands and Mallee adjoining Riverland and areas of Adelaide, Melbourne and Sydney.



Little Corellas (*Cacatua sanguinea*) roosting in a local native tree.

WHAT HAS BEEN DONE SO FAR?

Light Regional Council has trialled several strategies to date but has had limited success due to the number of birds. Several strategies have been used in an adhoc manner mainly reacting to complaints in local township areas. The following have been applied over the last two seasons since 2014 with limited success. Most complaints relate to bird activity either at sunrise or sunset when it has been impractical to dedicate staff to the complaints.

Water Cannon

A trial to prove a concept that water jets would deter the Little Corellas. The trial involved the use of a high pressure unit spraying a jet stream of water into the areas where the birds were roosting. The initial reaction from the birds was positive. The water spray caused them to fly up and away and circle around. As the water jet moved closer the birds moved from tree to tree but it was quickly evident that they weren't scared of the water and returned to nearby trees.

Scaring Tactics – Starter Pistol non lethal shooting

Council staff have trialled starter pistols at various intervals during the day at different locations. Results from the use of starter pistols has been positive in getting the birds to move but given the limited time and resources it only results in the birds returning the next day. The use of starter pistols in populated areas is limited especially around Hewett as the Birds loaf next to the primary school and day care centre. An intensive scare program around this area is limited to activity before and after school hours so as to not cause any distress to children at the school.

Amber Flashing lights

Vehicle mounted hazard flashing lights were mounted on the roof of the vehicle and the vehicle was driven around the areas where birds rested. The lights had no effect on the birds during daylight hours as they are deemed to be too dull to have any impact on the birds.

WHAT CAN WE DO MOVING FORWARD?

Strategies to Consider

The problems associated with large Little Corella flocks are not isolated to Light Regional Council. Neighbouring Councils such as the Barossa Council and the Town of Gawler experience the same issues. It has been identified by all three Council's General Inspectorate staff that without a regional or broader approach by all 3 Councils the problem will just be shifted from one Council area to another. A combined strategy to utilise a single contractor who has knowledge of the area and has experience in the migration of the birds combined with the on ground scare campaign applied by Council Staff to target scout birds should yield some good results this coming season. Some of the strategies to consider;

- **Bird Scaring (starter pistol) combined limited lethal shooting**

The use of starter pistols is useful in moving birds from their resting place. The idea of dislodging them from a location with a starter pistol has been positive in the past. An intense program of scaring birds as trialled successfully in the *Case study: Quorn Caravan Park, Management strategy 2004-2015* has proven to be successful.

It is anticipated that an initial site visit to each township 2-3 times a day with starter pistols for approximately 4-6 weeks. This is to be followed by the introduction of a contractor shooter to cull a number of scout birds. The combination of scaring and culling has reportedly been successful in deterring birds from roosting. This is an ongoing strategy that requires persistent attention to the bird roosting sites and needs to commence upon the presence of the first scout birds appearing and beyond.

- **Trapping and Gassing**

In Practice, trapping and euthanising birds is time consuming and requires the birds to be attracted to the trapping site, usually with food. The focus on trapping and gassing is on number reduction and has no impact on the problems caused by the birds. To have any real impact of this strategy would require dedicated resources

and a significant budget allocation. It was reported, a Victorian taxpayer sponsored program cost in excess of 1 million dollars over a five year period.

- **Visual Decoys**

The use of visual decoys has been around for centuries an undoubtedly the oldest method of scaring birds. Many modern equivalents are available today such as scarecrows, dead birds hung or spread on the ground, plastic bags or wine cask inners, balloon with big eyes displayed on them, reflective tapes, mirrors, humming tapes, plastic birds of prey, birds of prey kites and lately model remote control drones.

A combination of these deterrents can be applied as part of an integrated management program. The combination of these often yields long lasting effects if maintained over long periods of time.

Advantages of visual decoys are, low cost, quiet and unlikely to disturb local residents.

- **Strobe lights – Visual deterrent**

Strobe lights, high intensity white lights and high powered torches have been found to be effective deterrents for the birds. This would take place a sunset as the birds are settling down to roost for the night, the flashing lights have been proven to make the birds uneasy during roosting times causing them to fly off.

- **Laser Lights – Visual deterrent**

The purpose of the laser light is to startle the birds and make them uncomfortable at the roosting site. The birds will leave the site if they are disturbed by the laser light. The laser is pointed at the branches where the birds are roosting. The laser is not lethal to the birds. Laser lights and flashing torches are inexpensive with cost of less than \$100 per item.

- **Audible Gas Guns – Audible deterrent**

To satisfy Work, Health and Safety requirements, Council staff would need to be instructed in their safe use and confirm that they are in a serviceable condition. Gas guns have not been trialled yet due to the potential for a number of complaints it may receive from nearby landowners.

On this, the EPA has previously issued Environmental Noise Guidelines related to the use of Audible Bird-Scaring Devices. It is noted that these mainly relate to their use in primary production areas in proximity of residences on adjoining properties, rural living allotments and residential areas of townships. The EPA notes that the “testing of gas gun devices indicates that the resultant noise levels from one shot to the next, and from one model of gas gun to another can vary substantially”.

Due to noise restrictions such devices may only be used between 7am and 8pm. The guidelines provide that they must not exceed a prescribed noise level of 100dBA from each shot and that not more than 6 shots can occur in any

hour. Topography/ proximity of nearby houses and weather conditions are contributing factors that influence the achievement of these performance-based objectives (for instance, the guidelines recommend separation distances of 300m from the nearest house but these would increase in an area with 'valley' topography such as Hewett). As such devices are generally 'intended for purpose' Council staff are looking into whether there is any opportunity to deploy them near Hewett and Kapunda, mainly as staff are concerned that there are few safe options for a dedicated Contractor to conduct a discreet cull using live ammunition in these particular areas (for reasons of both general safety as well as, potentially, noise). If possible, the intention is to use such mechanisms to encourage the Corella flocks to move out of the suburban and township areas into spaces where any other measures, such as subsequent culling, can occur more readily and safely.

- **Community Awareness, Monitoring Behaviour and Movement**

An important part of Little Corella management will be to understand their behaviour. To have an effective management approach it is necessary to know where the flocks are roosting, feeding and how they move about during the day. The public are invited to report any Little Corella activity to Council to assist in a more effective approach. Council staff are aware that there will be sensitivities to introducing lethal elements to Council's Corella response plan and particularly that increased noise disturbance is very likely to result in localised complaints. Both may result in potentially negative publicity, to address this staff are mindful of the importance of communication and looking at ways to advise the community of Council's intentions in advance of these activities and this will also include keeping SAPOL advised in advance as a matter of course. Council staff will advise residents adjacent to operational areas (radius of 200m) directly via written correspondence and provide advice more broadly via a media release when carrying out any actions on the birds.

- **Monitor and Evaluate**

Monitor and evaluate the plan and regularly record strategies and how effective they were. Record bird activity at different sites and monitor behaviour patterns.

Review the plan seasonally if needed to ensure techniques are either working or ineffective. Adjust Little Corella Management Plan according to the bird's behaviour and movements from location to location.

Management Objectives

- Prevent Little Corella from establishing roosts in the Kapunda, Greenock, Roseworthy and Hewett townships over the 2016/17 season, or;
- Keep the number of birds to less than 200 per township, or;
- Ensure that Little Corellas do not Roost in any of the townships in any of the neighbouring Council areas as combined management plan.
- Minimise the impact of Little Corellas behaviour on trees and other infrastructure.
- Establish areas where it is acceptable for the Little Corellas to roost at night without causing early morning nuisance. These areas to be determined as suitable.

- Lobby State Government in an effort to seek assistance from the LGA and relevant State Government stakeholders to reinstate strategies that have since ceased over recent times.

Appendix 1. Feasibility/Acceptability criteria matrix

Control Option	Technically possible	Will it work?	Practicality possible?	Cost Benefit	Environmental Acceptable?	Political/legal Acceptable	Social Acceptable
Noise makers? Pistols/Gas guns	Yes	Yes	Yes	Yes	Yes	Yes	Yes/No
Visual deterrents	Yes	In conjunction With other strategy	Yes	Yes	Yes	Yes	Yes
Decoys deterrents	Yes	???	No	No	Yes	Yes	Yes
Shooting	Yes	In conjunction With other strategy	Yes	Yes	Yes	???	???
Trap and Gas	Yes	???	No	No	Yes	Yes	No
Egg destruction	No	No	No	No	Yes	Yes	Yes

Control Recommendations

As a result of looking at options and analysing the criteria matrix it makes economic and technical sense to utilise a combined bird scaring option with limited shooting. To gain further effect it is recommended that the use of visual deterrents be used in conjunction with the scaring and shooting option. This strategy combines the best possible options within the scope of available budget and resources.

Control strategies are to commence in the later part of the year around November when scout birds are looking for areas to roost for the season. It is anticipated that an intense scaring campaign in conjunction with other deterrents including shooting be used within the first 4-6 weeks of beginning the campaign. An early intervention will hopefully deter birds from settling in the township areas and forcing the birds into the greater country landscape.

References:

Managing impacts of Little Corellas on the Fleurieu Peninsula,
Action Strategy for the Little Corella 2015-2019, Flinders Ranges Council,