

REPORT

PORT ELLIOT DOG WASTE PROJECT

Introduction

Australia has one of the highest rates of pet ownership in the world, with more than one third of Australian households (38%) owning dogs. Dogs improve the quality of our lives, and studies show that exposure to dogs provides many health and social benefits and can even improve our immune system. One medium-sized dog produces about 180 kilograms of poo a year. With about 9 million dogs in Australia, it can really start to pile up (Ref 1).

When the Friends of the Port Elliot Dog Park thinking towards this project commenced in early 2019, documentation on ways to better manage dog waste was extremely limited and there seemed to be little action in Australia or other countries.

This project set out to trial a few strategies to reduce dog waste and plastic going to landfill and to share our learnings.

In August 2019, the Friends of the Port Elliot Dog Park via the Port Elliot Town and Foreshore Improvement Association were successful in receiving an Alexandrina Council Community Environment grant for \$1583. The project title was 'Reduce dog waste and plastic to landfill trial' referred to as the Port Elliot Dog Waste project. The budget covered equipment and materials with the majority of strategy implementation completed by volunteers, with assistance from project partners.

This project has been successful in making a contribution to new knowledge in Australia around strategies to manage dog waste in more eco-friendly ways and has contributed to improved awareness, knowledge and behaviour of dog owners, Council staff and the community around dog poop management.

Project Planning

The project was planned and guided by key documents developed early in the project by the working group which had representation from project partners Fleurieu Regional Waste Authority, Alexandrina Council, UniSA and Friends of the Port Elliot Dog Park.

Key planning steps that guided the successful delivery of this project included:

- Project Terms of Reference which were documented and agreed to by project partners and volunteers (attached Appendix 1)
- A project plan outlining the three project objectives and various strategies (attached Appendix 2)
- Procedural guidelines developed and followed for both green bin trials at the Port Elliot dog park and Horseshoe Bay (attached Appendix 3)
- Regular meetings held with monthly project reporting. Meeting actions were assigned to people to carry out and reviewed at each project meeting

Implementation

The key strategies planned to help reduce dog waste and associated plastic to landfill included trialing a green bin collection at the Port Elliot dog park, developing and sharing information to improve dog owner awareness and knowledge about managing dog waste better, learning about dog owner awareness, knowledge and behaviour around dog waste management and investigating insitu possibilities for managing dog waste on site at the dog park. An unintended benefit gained by our project was the donation of a “Doggie Dunny” green bin by Woodlands, Western Australia designed to reduce non-dog waste contamination. This resulted in two trials, a 12-week one at the dog park and a 2-week one at a local beach to see how well the design would work compared to a wheelie bin.

A. Dog park trial

Work on the Port Elliot dog park trial commenced in November 2019 at the first project working group meeting. Strategies to work out how to collect, weigh and remove all dog park dog waste via the green waste truck were developed and the equipment to do this identified and purchased. A green 240 Litre wheelie bin was painted lime green to stand out and the lid modified to prevent the addition of bulky items. The donated Doggie Dunny was also installed.

Four volunteers were recruited from the Friends of the Port Elliot Dog Park and trained in the protocol to weigh, measure and record all dog waste for 12 weeks in December 2019 and January 2020. This included recording any bin contamination. The Fleurieu Regional Waste Authority green truck collected the green bin each week, and this waste ended up as compost through Peats.

B. Dog Waste Survey

Very little information is documented about dog owners and their dog waste management practices. Partnering with UniSA presented the opportunity to design and implement a survey which has two purposes:

- 1) To learn more about dog owner awareness, attitudes and practice around the topic of dog waste management and
- 2) Share educational messages and information to dog owners relevant to managing dog waste.

Numerous hours of time were donated by a few staff to develop and administer the survey via the LimeSurvey platform. Social media was used to reach dog owners and enabled information to be collected from all over Australia (seven questions plus demographic info). Due to a huge response to the first survey in December 2019, a second survey was also developed and implemented in May 2020 (following a successful ethics application). This will support the publication of the data allowing it to be shared more broadly, planned for 2021.

C. Education

Educating dog owners about eco-friendly ways to manage dog waste was a specific project objective, and this was reinforced by information learnt from the survey. A range of strategies were developed including:

- A compostable dog waste bag image developed by the Fleurieu Regional Waste Authority and used widely in written information throughout the project and is ongoing
- Messages developed to increase community knowledge of the seedling symbol (the Australian standard for compostable bags). This information was used in the survey, on posters, Facebook posts and in displays
- A slogan developed “*Reducing dog waste from landfill, one compostable bag at a time*” and used on posters, displays and social media posts.

- A mascot “Snoopy” lookalike dog graphic purchased, re-modelled and used in many ways to provide friendly imaging for the project theme, including construction of a 50cm high paper-mache version
- Information and graphics were used in the two surveys reaching over 1800 people to help share educational messages
- A DL flyer developed by Alexandrina Council in consultation with the project working group provided a simple 2-step message to dog owners about how to dispose of dog waste via green waste bins. Collaboration with all four Fleurieu Councils resulted in this reaching residents of Alexandrina Council, City of Victor Harbor, District Council of Yankalilla and Kangaroo Island Council. This brochure was also distributed via post and electronically with 2020 dog renewal notices via the SA Dog and Cat Management Board to all Fleurieu Councils
- Signs were printed and displayed at the dog park, a Council foyer display developed for “Plastic Bag Free July” month and via a wide variety of social media platforms
- A ‘Bikkie and Beverage’ event held at the dog park used as a face-to-face meeting with local dog owners to verbally share messages
- A photo and story about the project published in The Times newspaper
- Project information presented at an WMRR Association, Australia - Waste Educators Group (SA Branch) meeting and shared with this group via email
- Project information was shared with the Woodlands Owner (Doggie Dinnie developer) and included in an article titled “*Smashing contamination: Woodlands*” published in the Australian Waste Management Review magazine in June 2020.

D. In situ and home dog waste composting

Dog waste is a weighty affair, so if not managed onsite requires resources at a cost to remove from where it is deposited by a dog. Insitu management at a dog park or at home, reduces the need for waste bags, trucks, staff, transport, and management of the waste. It also leaves the valuable nutrients of nitrogen and phosphorus in the community to do good.

The project aimed to learn more about insitu compost options for the Port Elliot dog park. A few strategies were used to seek this information which it proved difficult to find. Approaches made to the Fleurieu Regional Waste Authority, Gardening Australia via Sophie Thompson, businesses making pet composters, social media and online searches did not reveal any affordable or practical solutions. Options found required regular and ongoing hands-on effort that would be tricky to fund by Councils and too much to expect of volunteers or were very expensive.

An easier option was collating information for dog owners about options for managing dog waste at home. A two-page brochure was developed describing several options including commercially available ones and a low cost “make your own”. This brochure was shared in October 2020 via social media and through the WMRR Association, Australia - Waste Educators Group (SA Branch).

Results

This project helped a lot of people learn more about managing dog waste. The project reached many dog owners as well as a wide range of business folk with an interest in waste and the environment. Several of the strategies from this project will be ongoing so the benefits of this work will continue. Publication of the dog waste survey data will enable people around the world to find and learn about this topic (planned for 2021).

Successful aspects of this project include:

- Recruitment of volunteers and the donation of hundreds of hours to the project by these members of the community

- The first Australian trial (we believe) measuring and recording dog waste collected in a dog park and at a local beach
- Completion of a 12-week trial that diverted 2568 bags from landfill (equates to over 11,000 bags/year or approximately 800 kg).
- Demonstrated success of dog waste bin modifications and design to minimise the contamination of non-dog waste enabling it to be collected by green waste trucks and converted to compost through an industrial compost system
- Continuation of the collection of dog waste from the Port Elliot dog park by the Fleurieu Regional Waste Authority green waste truck system so diversion from landfill is ongoing
- Two successful trials with Woodlands “Doggie Dunnie” - a special dog waste bin designed to minimise contamination. As a result of the Port Elliot dog park and Horseshoe Bay trials several SA Councils have also invested in Doggie Dummies
- The 14-day trial with the Doggie Dunnie located at the middle carpark at the popular public beach Horseshoe Bay was small (74 bags collected). It included the June long weekend and resulted in no contamination from general rubbish, and only five percent contamination from plastic dog waste bags
- Completion of two dog waste surveys with terrific reach and engagement with the public (mostly in SA but went Australia wide). Valuable information and insights were learnt and at the same time valuable information imparted to survey responders.
- Findings from the two surveys reported and shared with professionals and the community
- Trial and survey information has been gathered, collated, documented and shared via email and social media to the public (especially dog owner groups), various Councils (SA and interstate), Waste Authorities staff and Uni students.
- Publication of project data by UniSA partner is scheduled for 2021 to provide worldwide access
- Evidence of increased awareness and knowledge and dog owner behaviour regarding dog waste management has been gathered. For example in the Fleurieu region results showed an increased use of compostable bags (10%), increased use of green bins for dog waste (9%), increased dog owner awareness of the seedling symbol (8%) and a reduction in the use of biodegradable bags for dog waste (6%).
- Information about options to safely compost dog waste at home has been collated, developed into a brochure, and shared with key partners and the public
- Alexandrina Council changed to compostable bags before our project commenced so the original intent to introduce compostable bags via this project had already been achieved. It is possible ‘noise’ from our project encouraged this change!

Conclusion

We have learnt a lot and shared what we have learnt to influence action by key partners and dog owners around more eco-friendly ways to manage dog waste. We have already seen change this project has helped foster and create.

It has been a great community project delving into the little-known topic of dog waste and related plastic and landfill. There was quite low-level noise about keeping dog waste out of landfill when this project started. There seems to be more noise now (within the space of a year)!

Alexandrina Council had good vision to fund this project which has successfully trialed strategies and gathered and shared information about diverting dog waste and plastic from landfill.

This project relied heavily on many hours of volunteer time and would not have been possible without the terrific support of volunteers of the Friends of the Port Elliot Dog Park and project partners.

Acknowledgements

Project Working Group: David Heath, Monika Rhodes (Alexandrina Council), Jane Brook and Joanne McPhee (Fleurieu Regional Waste Authority), Dr Janette Young and Sheila Burgin (UniSA), Anita Judd, Don Fraser and Ruth Miller (Friends of the Port Elliot Dog Park)

Trial volunteers: Jane Hill, Angie Spartan, Don Fraser, Ruth Miller

Auspice: Port Elliot Town and Foreshore Improvement Association

Sponsors: Evan Jackson (AMS Products), Andrew Wynne (Woodlands)

Support: WMRR Association, Australia - Waste Educators Group (SA Branch)

Media: The Times

APPENDIX 1 – Project Terms of Reference

APPENDIX 2 – Project Plan

APPENDIX 3 – Procedural guidelines for bin trials

APPENDIX 4 – Survey summary (available on request)

APPENDIX 5 – Project Receipts

APPENDIX 6 – Project Photo story

Budget

Project Items	Approved budget	Actual budget
Equipment – scales \$120 Bin weighing apparatus for baseline and evaluation (guesstimate)	\$120	205.27
Bins, locks, lid modification, bin art \$711 240 Litre green waste bins and one general waste bin with small opening (\$67x3) Bin lid lock keys x 2 @\$80 Costs to modify bin opening x3 \$50 and enhance compostable bins with art by young people \$200	\$711	43.58
Materials – education, promotional, signage \$550 Educational material e.g. posters, flyers, corflutes and signs	\$550	\$1321.30
Services – bin collection \$200 Dog waste bin collection fees – two extra green waste bins weekly for 6 months	\$200	Donated by FRWA
TOTAL	\$1581	\$1570.15

Doggie Dunny 75 Litre bin - donated		\$1500.00
In kind donation of time by volunteers 240hrs@\$41.72/hr Actual 430 hours@\$41.72/hr	\$10,013.00	\$17,939.00
Subtotal	\$10,013.00	\$19,439.00
GRAND TOTAL	\$11,594.00	\$21,009.15

Budget expenses

Equipment 240 Litre green waste bins \$67 Platform scales \$103 Bin tongs \$9.95 Concrete slab for Doggie Dunny support \$20.20 Dynabolts \$5.12	\$205.27
Bin modifications Plastic elbows 2 (\$11.50) Flange 2 (\$7.24) Eye bolts for lock 2 (\$3.30) Paint 500mLx2 (\$15.90) Silicone \$5.64	\$43.58
Printing Bollard corflute signs x 2 \$286 Grommets \$8.26 Dog cartoon image \$39.60 12 A3 colour laminated posters \$22.50, \$13.60, \$7 3 A1 posters for foyer display \$148.50 Education event refreshments \$35.85 Publishing costs \$750	\$1321.30
TOTAL	\$1570.15

In kind (estimate 430+ hours - Volunteer rate \$41.72/hour, Ref 2)

- Monthly project meetings and one-on-one meetings with various project partners and professional “experts”
- Project development, planning and reporting to project team and the Port Elliot Town and Foreshore Improvement Association (includes 12-week dog park trial, Horseshoe Bay 2-week trial)
- Volunteer dog park bin trial information and training
- Equipment purchase, collection, modification and artwork
- Educational material consultation, research, design and printing
- Social media strategy development and implementation
- Pre and post dog waste survey research and discussion, development, implementation, evaluation and reporting
- Partner consultation and contributions

Total donated - \$17,939+

References

Reference 1 - <https://www.abc.net.au/news/2018-12-28/dont-waste-your-dogs-poo-compost-it/10668760>, accessed 28 Oct 2020

Reference 2 - <https://www.fundingcentre.com.au/help/valuing-volunteer-labour/>, accessed August 2018