

Forest & Bird Dunedin
PO Box 6230, Dunedin North, Dunedin 9059
dunedin.branch@forestandbird.org.nz

Dunedin City Council
PO Box 5045, Dunedin 9054
parksconsulting@dcc.govt.nz

Dunedin City Council Open Spaces Plan

27 January 2022

Introduction

The Royal Forest & Bird Protection Society of New Zealand Inc (**Forest & Bird**) is New Zealand's longest running independent conservation organisation. Its purpose is to take all reasonable steps within its power for the preservation and protection of the indigenous flora and fauna and the natural features of New Zealand.

Forest & Bird has for many years had a strong interest and involvement in the Dunedin area and has a long-standing interest in improving biodiversity and protecting and enhancing landscapes in the wider Otago region. We have one branch in Dunedin that is involved in a wide range of conservation and advocacy activities.

I provide the following submission on behalf of the Dunedin Forest and Bird branch. To assist with analysis, the submission has been structured to be consistent with the Open Spaces Plan Feedback Form:

Question	Paragraph
What do you like about our open spaces?	2 – 4
What do you dislike about our open spaces?	5 – 6
Do you agree with our priorities for the Open Spaces Plan? (including explanation)	7 – 9
What four topics would you prioritise to improve open spaces?	17 – 18
What other outcomes would you like to see the Open Spaces Plan address?	10 – 16
What future plans does your organisation have that will impact on how much and the types of open spaces we provide?	N/A
Do you have any other comments about the Open Spaces Plan?	19

Submission

1. Open spaces are integral to the good functioning of nature and people in urban environments. I quote below from an excellent summary of this relationship from a letter in a journal of the Society for Conservation Biology:

“Cities are increasingly recognized as important places for biodiversity conservation, and can harbor a diversity of plant and animal species, including threatened species. They are also important places for conservation from a human perspective. Exposure to nature in cities delivers a remarkable range of health and well-being benefits, including stress reduction, reduced mortality, and improved cognitive development in children. Intriguingly, biodiverse green spaces may deliver greater benefits than less diverse spaces. Biodiversity conservation in cities therefore presents a unique opportunity to reconnect urban residents with nature and its associated benefits.

However, urbanization has myriad impacts on biodiversity, including habitat loss and fragmentation, changes to resource availability, introduction of exotic species, alteration of local climates via the urban heat island, modification of natural disturbance regimes, and increased levels of chemical, light and noise pollution. These changes lead to reduced species and genetic diversity, biotic homogenization, and loss of ecological function and ecosystem services. These impacts are long-lasting with little option for reversal, making urbanization one of the greatest drivers of biodiversity loss.”

(Garrard, Williams, Mata, Thomas, & Bekessy, 2017)

2. As residents of Dunedin and its surrounds, we are keenly invested in the management of Dunedin's open spaces – both for the sake of nature and the quality of our lives.
3. In the inner city, the size and scale of Dunedin's open spaces is unique. This predominantly is due to the town belt, which forms an excellent basis for green spaces and allows nature to function within the urban footprint, providing refuge habitat for flora and fauna. The town belt is also a rare feature in New Zealand cities, with Dunedin being one of only three cities with a town belt. These spaces are an asset for the city, contributing to its environment, heritage and character. They must be recognised as high value and be protected.
4. Similarly, Dunedin's open spaces outside the urban area are known to be biodiverse and host a wide array of endangered species. We are pleased that Dunedin is able to claim the moniker of 'The Wildlife Capital of New Zealand' and seek that the Council lives up to this label.
5. Unfortunately, outside of the inner city, urban areas in the Dunedin City Council (DCC) district do not share in the size and scale of open spaces. Newer suburbs of the city and surrounding townships are often devoid of meaningful greenspaces that can provide ecosystem function and habitat in an urban setting. In these places, both nature and residents do not benefit from the positive aspects of urban nature identified in the quote above.

6. The greenspaces that do exist within the district, particularly in urban settings, can be better managed to promote biodiversity. By adopting the recommendations in this submission, Dunedin's open spaces could better contribute to the ecological integrity of the district. Aside from contributing to conserving of nature, this brings with it multiple benefits such as mitigating impacts of climate change, creating greenspaces that benefit the mental health of residents, and adding to the character of the city.
7. If the DCC were to wholeheartedly embrace environmental restoration principles for all open spaces, we see a future Dunedin that lives up to its wildlife capital reputation within urban areas, not just their surrounds. We know that investment in New Zealand's urban ecosystems can allow wildlife to thrive, as demonstrated by Wellington where Kākā (*Nestor meridionalis*) have been enabled roam the city's skies once again (Zealandia, 2022).
8. We strongly encourage the Open Spaces Plan to set an ambitious vision – one in which open spaces are a driving force for the restoration of the district's flora and fauna in both urban and rural settings. Achieving such a vision would be transformative and create benefits for nature and residents.
9. However, the priorities currently proposed for the Open Spaces Plan will not be sufficient to direct such a vision. Generally, we support the priorities and seek that they be made more direct – with a clear focus on protecting and restoring the ecological integrity of ecosystems – particularly in urban settings. The priorities must be clear and directive, so that their guidance is unambiguous to future urban planners.
10. We seek that open spaces in Dunedin are plentiful, well designed and actively maintained so that they:
 - a. protect and restore the ecosystems as the priority;
 - b. are encouraged to increase in size and quality over time;
 - c. mitigate the city's carbon footprint and urban heat island capacity;
 - d. provide easily accessible greenspaces for residents and visitors;
 - e. facilitate access to adjacent freshwater bodies;
 - f. facilitate connections for active transport; and
 - g. provide clear and educational interpretation and wayfinding signage for users.
11. We acknowledge that there will be competing uses for Dunedin's open spaces and not all open spaces will provide for 'wild' ecosystems. Given the intense loss of habitat and landscape modification in urban areas across the district, particularly in urban areas, we recommend that the management of all open spaces include consideration of, and a contribution to, the integrity or understanding of local ecosystems. Examples of ways this may be practically applied include:
 - a. encouraging wildlife friendly plantings in where they have not been previously, such as in unused margins of sports field complexes or in parks;

- b. installing educational signage in open spaces to inform people about the culture, history, and environment of the area, for example signage in the Octagon that informs the public about the tarāpunga / red-billed gull (*Larus novaehollandiae*) and their status as a species that is at risk, declining;
 - c. encouraging edible tree plantings, which are a dual resource for biodiversity;
 - d. rather than maximising use in all open spaces, encourage and manage public usage in a manner that is appropriate to the integrity of ecosystems in the open spaces network, for example designing tracks to encourage people into – or away from – high or low use areas; and
 - e. ensuring habitat within reserves is representative of ecosystems in the district and that connectivity to facilitate animal movement is encouraged between existing and future reserves.
- 12. We seek that pest control continue to be a focus of the management of open spaces. Open spaces provide a refuge and habitat for pest species such as possums, rats and mustelids. Without proper pest control, gains in the protection of habitat within the open spaces network may be unable to be utilised by native biodiversity.
- 13. We acknowledge Dunedin City Council's support of Predator Free Dunedin as a key funder and delivery partner for City Sanctuary. The work being carried out by City Sanctuary within priority reserves is of immense value and we fully support their continued work in Dunedin's open spaces. Gains for native biodiversity through predator control are already being demonstrated, with kakarūwai / South Island robin (*Petrocia australis*) being observed in Ross Creek Reserve, and several pairs of titipounamu / rifleman (*Acanthisitta chloris*) that are now nesting in the area. Dunedin also has the highest number of kererū per capita, according to results from the Great Kererū Count (2021).
- 14. A focus on pest control within Dunedin's open spaces presents a unique opportunity to coordinate pest control activities across the district without the inefficiencies of dealing with thousands of individual landholders. Because of this, the DCC holds significant power in controlling pests in the district. We implore staff and Councillors to take advantage of this opportunity by continuing its support for initiatives like Predator Free Dunedin and continuing to increase pest control activities within open spaces.
- 15. We are similarly concerned about the impact of domestic animals on fauna within Dunedin's open spaces:
 - a. While dog control regulations are generally beneficial in the district, signage in open spaces that host fauna at risk of dog attack can be improved.
 - b. Controls on domestic cats are virtually non-existent in Dunedin, yet they are known to be efficient predators and may be capable of reducing the effectiveness of habitat improvements gained via the Open Spaces Plan. We previously wrote to the DCC about the regulation of domestic cats as part of the *Keeping of Small Animals (excluding Dogs) and Birds* Bylaw. We

seek that the recommendations of our submission¹ are adopted as complementary measures to the Open Spaces Plan. In addition to these, we seek that the Open Spaces Plan guide DCC planners to set restrictions that require landholdings in new subdivisions near open spaces to avoid keeping domestic cats. A precedent for this exists, with cats being banned from new subdivisions in Kāpiti Coast and Hamilton.

16. Dunedin also hosts a number of unique plant species within its open spaces. One example of this is the white mistletoe (*Tupeia antarctica*) which is found in only three locations within Otago, of which the Dunedin town belt is one. Open spaces which host rare or unique species should be recognised and managed to protect this trait within the Open Spaces Plan.
17. In respect to choosing four priorities to improve open spaces, we have already noted our clear preference for prioritising the protection and restoration of Dunedin's ecosystems, for the good of nature and the enjoyment of the public. We note that this aim is multifaceted and requires consideration of climate change; meeting the needs of future generations; biodiversity; and mauri and sustainable environments.
18. We support giving effect to the Treaty of Waitangi and do not see Iwi partnership as a competing priority per se, but a part of good governance.
19. We note that there is an abundance of quality resources to assist with the development of the Open Spaces Plan. Some resources that we recommend include:
 - a. Cities With Nature (2022), a platform partnering with the Nature Conservancy, the International Union for Conservation of Nature and ICLEI where cities can connect and share approaches to working with nature. The platform also features an abundance of useful tools and resources. We note that no cities from New Zealand are yet represented within the network.
 - b. A catalogue of nature-based solutions for urban resilience (World Bank: Global Program on Nature-based Solutions, 2021), a practical guide produced by the World Bank on a wide array of solutions in urban environments.
 - c. The framework for Biodiversity Sensitive Urban Design (Garrard, Williams, Mata, Thomas, & Bekessy, 2017) which is outlined in the letter quoted at the beginning of this submission and is predicated on five principles – maintain and introduce habitat; facilitate dispersal; minimise threats and anthropogenic disturbances; facilitate natural ecological processes; and improve potential for positive human-nature interactions. These principles are closely aligned with the themes and recommendations of this submission.
20. Thank you for the opportunity to provide feedback on this matter. If Council Officers or Councillors have any further questions about this submission, please do not hesitate to contact me. We would be eager to discuss the matters raised in this submission in more detail.

¹ A limit of three cats per household be imposed, that microchipping, registration and de-sexing of cats is compulsory.



Nigel Paragreen

Committee member, Forest & Bird Dunedin

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References

- Cities with Nature. (2022, January 23). *Home*. Retrieved from Cities with Nature: <https://citieswithnature.org/>
- Garrard, G. E., Williams, N. S., Mata, L., Thomas, J., & Bekessy, S. A. (2017). Biodiversity Sensitive Urban Design. *Conservation Letters*, 11(2), 1 - 10. Retrieved from <https://conbio.onlinelibrary.wiley.com/doi/full/10.1111/conl.12411>
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