Darebin Nature Plan 2021-2025

A restored, reconnected and resilient natural environment for the benefit of people and nature.

Darebin City Council has made a commitment through the Council Plan 2021-2025 to protect and enhance nature, promote biodiversity and create a more liveable city. Council values the natural environment, the wildlife it supports and the essential ecosystem services it provides like cooling, shading, clean air and water purification. The Darebin Nature Plan consolidates the priorities for action over the next 4 years to ensure that our natural environment is protected and enhanced for the benefit of both nature and people.

Acknowledgement of Traditional Owners

Darebin City Council acknowledges the Wurundjeri Woi Wurrung people as the traditional owners and custodians of the land and waters we now call Darebin and pays respect to their elders, past, present and emerging. Council affirms that Wurundjeri Woi Wurrung people have lived on this land for millennia, practising their ceremonies of celebration, initiation and renewal. Council respects and recognises all Aboriginal and Torres Strait Islander communities and their values, living culture and practices, including their continuing spiritual connection to the land and waters and their right to self-determination.

Context

Darebin has experienced extensive biodiversity loss over the past two centuries due to land development, land clearing, water pollution, pest animals, environmental weeds and, more recently, reduced resilience as a result of climate change. The progressive loss of biodiversity threatens our ecosystems and damages our natural environment. Changes in urban form, a growing population and climate change continue to place increasing stress on the vegetation and wildlife within Darebin.

Benefits of Nature in Darebin

The actions set out in this plan aim to protect and restore ecosystems to provide benefits that contribute to improved community health, enhanced biodiversity, economic development and urban resilience. With good design, improvements to the natural environment will provide a multitude of benefits as illustrated in figure 1.

Environmental benefits



Enhanced biodiversity
Increased air purification
Improved water filtration
Flood mitigation
Increased carbon sequestration
Shading and cooling

Community health



Improved mental health
Improved physical health
Reduced heat related illnesses
Improved social cohesion
Connection with nature
Reduced sun exposure
Cultural identity
Climate resilience

Economic benefits



Attractive shopping precincts Increased property value Contribution to place making Improved productivity

Figure 1: Benefits of healthy urban natural environments

| Objective 1: Establish strong partnerships with Traditional Owner Groups, government agencies and Darebin's diverse communities. | | | | |
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| Initiate, and jointly design, a respectful partnership engagement approach with the Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation, to understand the feasibility and resources required for Council to hand back land and responsibility for land management. | • | • | • | • |
| Establish and lead an Edwardes Lake task force to facilitate a collaborative approach between major stakeholders to find practical solutions to improve water quality, biodiversity and amenity. | • | • | • | • |
| Develop a Community Planting Guide | • | <u>.</u> | | |
| Facilitate and support volunteer opportunities with Council across our diverse communities, to strengthen community connection to the natural environment. | • | • | • | • |
| Work with community groups and volunteers to improve the natural environment. | • | • | • | • |
| Develop a Community Planting Guide | • | | | |
| Establish an Indigenous Ranger Program. | | | | • |

| Objective 2: Protect what we have, extend habitat and improve ecological connectivity. | | | | |
|--|---|---|---|---|
| Rehabilitate Edwardes Lake Park and re-forest Edgars Creek in Reservoir, to achieve significant and measurable improvements in biodiversity and water quality by 2025. • Successfully partner with Melbourne Water to: - Carry out weed management and revegetation works along Edgars Creek - Extend public access through Melbourne Water-owned reaches of Edgars Creek | • | • | • | • |
| Plant 10,000 indigenous, aquatic and riparian plants along Edgars Creek on Council owned land, by December 2022 | • | | | |
| Develop universal planting standards for our city and a process to track progress. | | | | • |
| Prioritise the rehabilitation of existing grasslands through cool burns. | | | | • |

| Objective 3: Integrate nature into the built environment to build climate resilience and enhance liveability. | | | | Year 4 |
|---|---|---|---|-----------|
| Develop a roadmap to reach 40% canopy cover of the city by 2050 that includes the promotion of biodiversity (including diversity of species) to ensure resilience of flora and fauna. | • | | | |
| Improve streetscapes to support COVID-19 recovery to uplift business activity with street tree planting, planter boxes, and renewed and replanted garden beds. | • | | | |
| Increase shade in our business activity centres to support footpath trading with trees and parklets. Including: | • | • | • | • |
| Update footpath trading communications and guidelines, to encourage shade in our business activity centres to support footpath trading | • | | | |
| Identify opportunities for additional trees to provide shade in our business activity centres | • | | | |
| Develop a Shade Policy | • | | | |
| Continue to deliver the Street Tree Planting Program, prioritising areas without coverage, areas where people are experiencing disadvantage, and business activity centres including avenues of trees for calmer traffic and extended life expectancy of road surfaces. | • | • | • | • |
| Maximise opportunities for plantings on roundabouts across our city to improve amenity with quality planting. | • | • | • | • |

Projects underway



Figure 2: Using aerial imagery, canopy cover can be measured across different land uses and suburbs to inform Council strategy and policy.

Policy Work

Policy and strategy work that sets out to protect, increase and enhance nature is in progress. The Darebin Shade Policy informs the provision of both natural and structural shade within Council owned and managed open space. The community planting guidelines are being developed to support nature strip plantings that enhance biodiversity within the streetscape. A roadmap to 40% Canopy Cover has been developed to prioritise initiatives to increase Canopy Cover across the Municipality.



Figure 3 Bushland staff and volunteers participating in the City Nature Challenge 2022

Volunteering

Darebin City Council hosts community planting days as a part of Darebin's Rewilding program and conservation works along the Merri Creek, Darebin Creek, Edwardes Lake and Edgars Creek. Early in 2022, Darebin hosted the City Nature Challenge providing opportunity for volunteers to contribute to citizen science. Our Gardens for Wildlife program is underway supported by a team of volunteer garden guides who work with residents to turn their backyards into wildlife friendly gardens.



Figure 4: Newly planted street trees will provide shade in the years to come

Canopy Cover and urban greening

Trees within retail activity centres have been established to increase shade; improve amenity and uplift business activity. Across the city many roundabouts have been rewilded to include low growing shrubs and wildflowers for pollinator species. Each year, Darebin's ambitious street tree planting program, prioritises areas with low canopy cover, areas where people are experiencing disadvantage and business activity centres. Increased canopy coverage provides relief to extreme heat waves with valuable shading and cooling; improved amenity for the community and a safe and environmentally sustainable city for the future.



Figure 5: Cool burn at Ngarri-djarrang, Reservoir

Cool burns

Cool burns have been conducted within endangered grassland within several bushland reserves. Regular burning of the Western Plains grasslands reduces the size of large native tussock-forming grasses such as Kangaroo Grass (Themeda triandra). This increases biodiversity by allowing more space for rarer native wildflowers such orchids and lilies to regenerate and grow amongst the native grasses.



Figure 6: Edwardes Lake looking East towards Griffiths St from tennis courts

Edwardes Lake and Edgars Creek

Darebin City Council is leading a task force to facilitate a collaborative approach established between major stakeholders to find practical solutions to improve water quality, biodiversity and amenity.

Edwardes Lake Park offers a sanctuary for an abundance of wildlife and provides a green space for the community. It filters and harvests stormwater and reduces the risk of flooding to surrounding properties.



Figure 7: New rewilding planting of indigenous grasses

Rewilding

Helping to address the climate and biodiversity emergency via the provision of native vegetation, Rewilding delivers countless benefits to both the natural environment and the community:

- Increased shade to reduce urban heat impacting residents.
- Improved visual amenity values of parks & open space.
- Creation of new habitat from revegetation.
- Improved opportunities for habitat connectivity between key biodiversity sites such as Darebin's major waterways.

A planting palette, decision making matrix and measure has been developed to guide the design and species selected for each rewilded area.

Glossary

Nature Nature is understood here as biodiversity (species, habitats and ecosystems) that is native

to the region.

Biodiversity All components of the living world: the number and variety of plants, animals and other

living things (including fungi and micro-organisms) across our land, rivers, coast, and ocean. It includes the diversity of their genetic information, the habitats and ecosystems within

which they live, and their connections with other life forms and the natural world.

Ecosystem A community or group of living organisms that live in and interact with each other in a

specific environment.

Ecosystem services The benefits people obtain from healthy ecosystems. These include provisioning services

such as food and water; regulating services such as flood and disease control; cultural services such as spiritual, recreational, and cultural benefits; and supporting services such

as nutrient cycling that maintain the conditions for life on earth.

Connectivity The capacity of plants, animals and other living things to move between disjunct landscape

elements such as habitat patches, lakes and streams

Habitat All the physical and biological things that collectively make up the place where a plant or

animal lives.

Resilient The ability of individuals, communities, institutions, businesses, systems and infrastructure

to survive, adapt and grow, no matter what chronic stresses or shocks they encounter