

2025 Biodiversity Survey

Exploring Aquatic Fauna of Karrawirra Pari /
River Torrens

Park Lands Policy and Sustainability

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Kadaltilla
Adelaide Park Lands Authority



Purpose

The purpose of the workshop is to share the results of the 2025 biodiversity monitoring, evaluation and reporting program which focused on aquatic fauna found along Karrawirra Pari / River Torrens.

The 2025 biodiversity survey was completed between April and June 2025.



Key Questions

What are the Board Members' views on the results of the aquatic fauna found along Karrawirra Pari / River Torrens?

Are there specific aspects or thematic groups of biodiversity within the Adelaide Park Lands that Board Members would like to explore in more detail?

Strategic Alignment

Strategy	Outcomes
Adelaide Park Lands Management Strategy - Towards 2036	Goal 3 — Natural Systems, Cultural Landscapes and Climate Resilience Strategy 3.10 Continue to survey, monitor and improve our knowledge of Adelaide Park Lands biodiversity. Share data and report findings.
Kadaltilla Strategic Plan 2023-2028	Environmental Performance Initiative 2.2 Regularly review tree canopy cover, biodiversity, and environmental sustainability in the Park Lands

Biodiversity Program

A city where nature thrives

Investigate

- Research
- Biodiversity Survey(s)
- Biodiversity monitoring, evaluation & reporting program
- Smart technology
- DNA resources

Integrate

- APLMS / Integrated Climate Strategy
- Key Biodiversity Area Management Plans
- Fire management
- Cultural learning
- Natural systems
- Biocorridors
- Habitat

Collaborate

- Aboriginal Ranger Program
- Species recovery
- Citizen science
- Volunteer program
- Partnerships
- Industry
- Non-Government Organisations
- Education
- Interest groups

Celebrate

- Biohub
- Community events
- Biofestival
- Promotions media
- Education
- Advocacy
- Storytelling
- Printed media

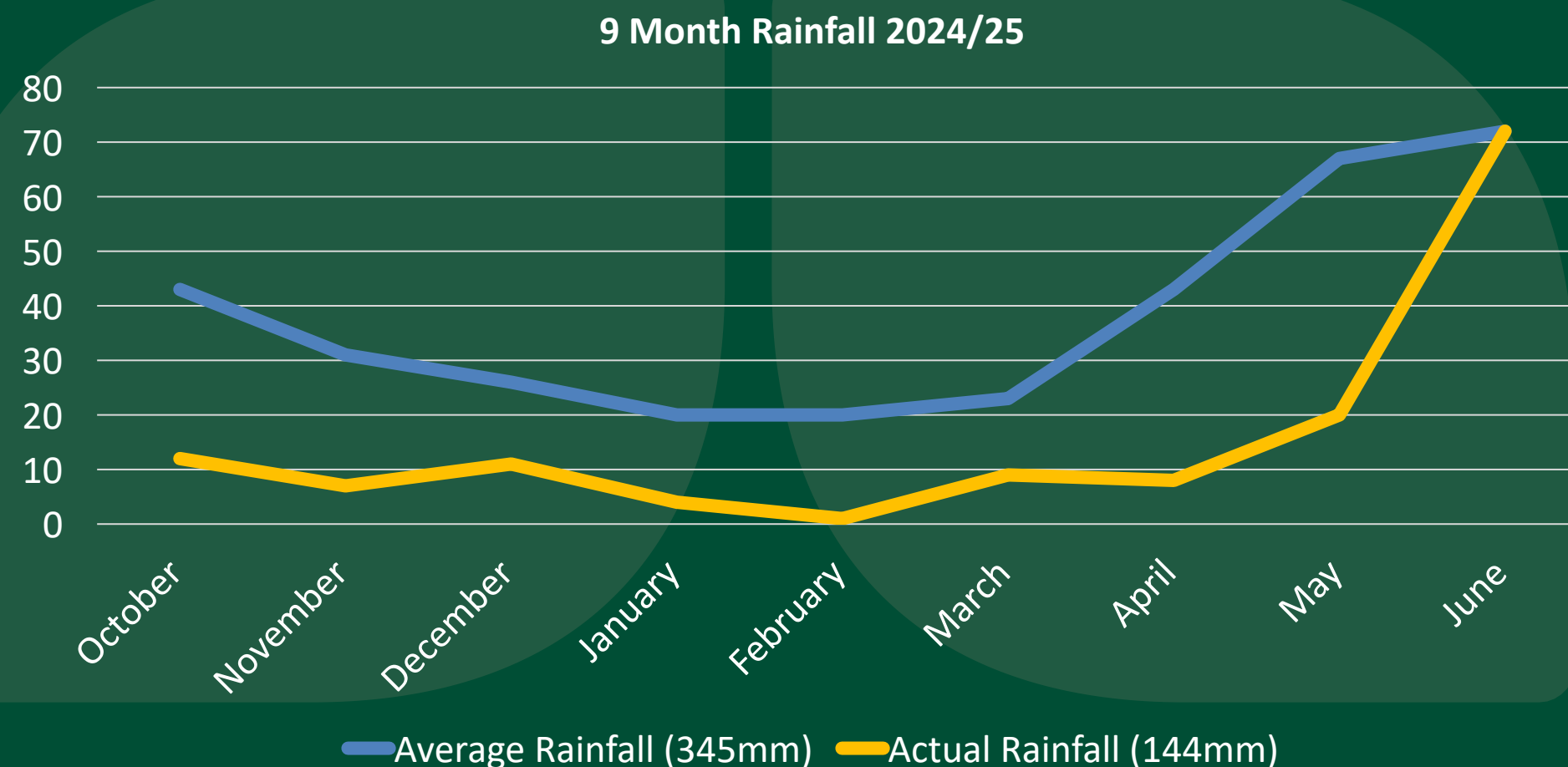
Survey Area – 5km stretch of Karrawirra Pari / River Torrens

- Port Road to Morphett Street, Pinky Flat (North) and Frome Road to Hackney Road



Influencing Factors

- Below average rainfall (41%)
- Small and major events (e.g. Gather Round, Illuminate Adelaide, Parkrun and Mothers Day Classic)
- nWCH pile driving for carpark and general construction
- Torrens Lake boat ramp renewal works
- Pathways, weed control & planting in Mistletoe Park / Tainmuntilla (Park 11) near the City of Adelaide nursery



Methods

1. Timed area surveys
 2. Spot lighting
 3. Baited camera traps
 4. Opportunistic observations
- Extended timeframe April – June 2025
 - Dawn, day and dusk surveys timed after rainfall
 - Dry conditions influenced abundance and diversity records

Landscape Typology:

Karrawirra Pari - River Red Gum vegetation association with exotic species throughout

Baits:

Peanut butter, oats and olive oil in tea strainers on a cork board

Motion sensing cameras that trigger 3 photos in rapid succession



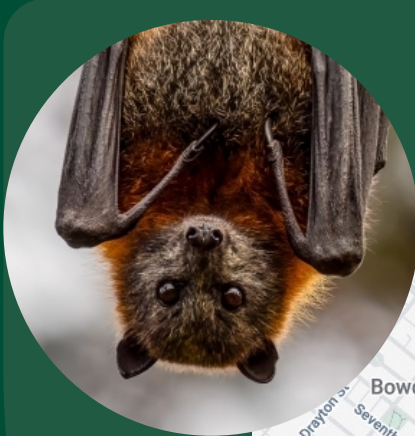
Results

- 54 total fauna species
 - 44 birds
 - 5 mammals
 - 4 reptiles
 - 1 amphibian
-
- Noted species conservation status Grey Headed Flying Fox (Vulnerable) and Brushtail Possum (Rare)
 - Local populations of both in the city
 - Frog numbers were low - single species at a single site
 - Native woodland birds in low numbers

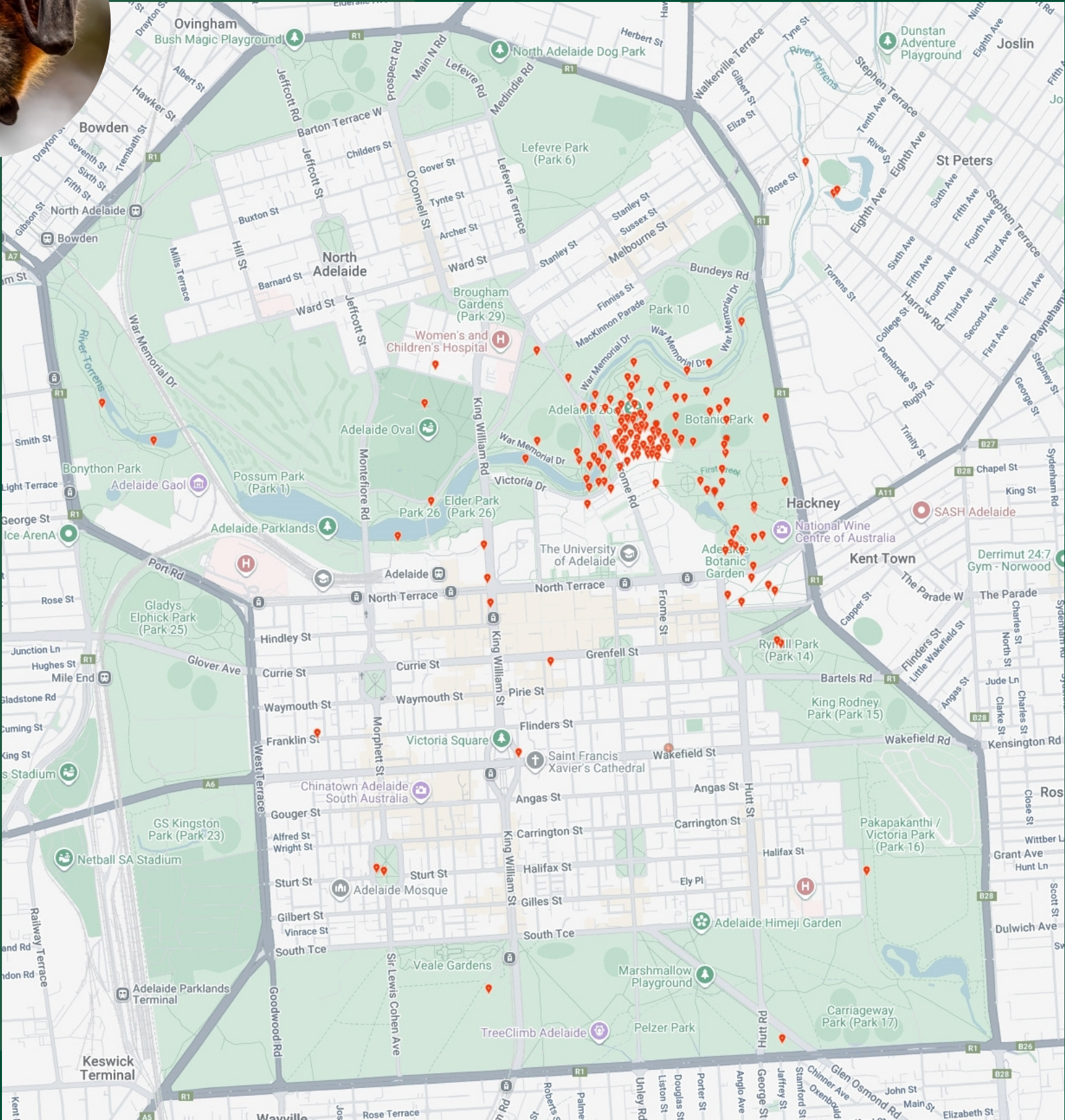


Photo credit -GregSmith.au

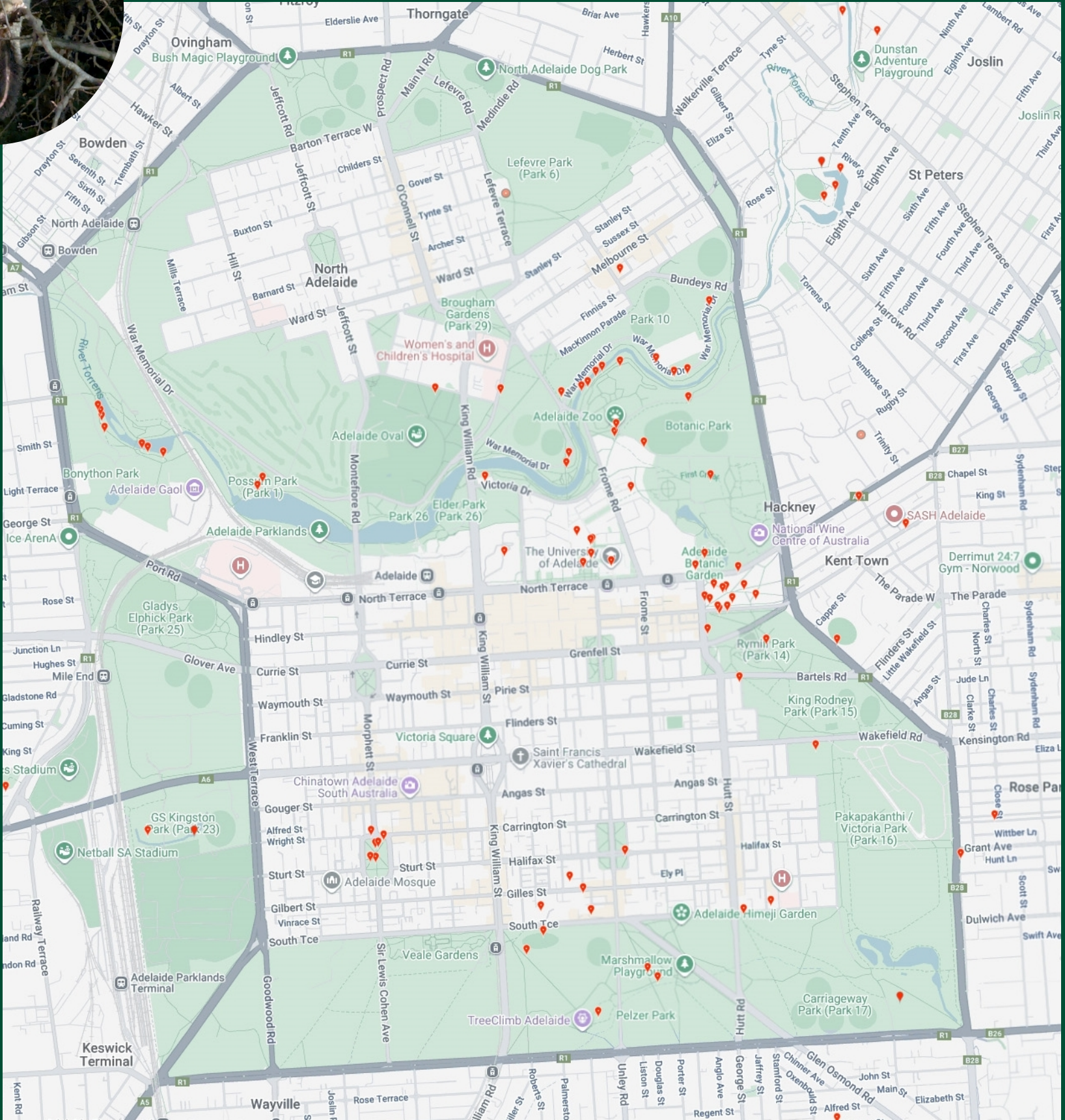
Distribution



Grey Headed Flying Fox - *Maityumaityu*



Brushtail Possum - *Pirlta*



Observations

Common and well-known urban species observed include:

- Black Ducks - *tawanta*
- Corellas
- Magpies - *kurraka*
- Rosellas - *warltu-arri*
- Rainbow lorikeets - *ngakala*
- Pigeons - *kawu*
- Noisy miners
- Seagulls - *yawu*
- Galahs
- Kookaburras - *ngungana*
- Willie Wagtails
- Pelican – *yaltu*
- Sulphur Crested Cockatoos - *kurdaki*
- Swallows - *manimaninya*
- Garden skinks - *yuru*
- Rats - *nungata*
- Mice - *purkupurku*



Observations



Australasian Darter



Little Black Cormorants

Observations

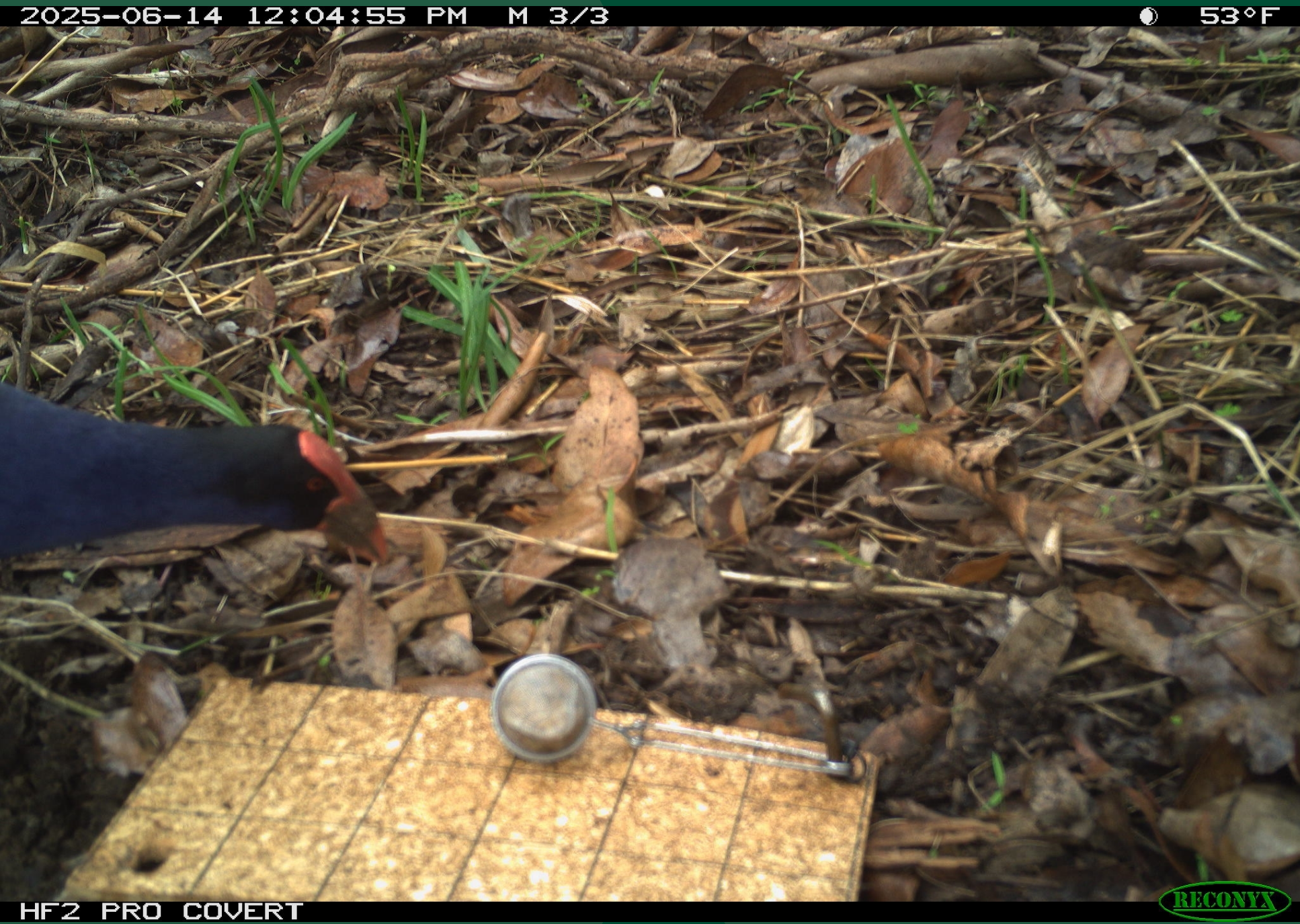


Nankeen Night Heron



Nankeen Night Heron (Juvenile)

Observations



Australasian Swamphen



Magpie

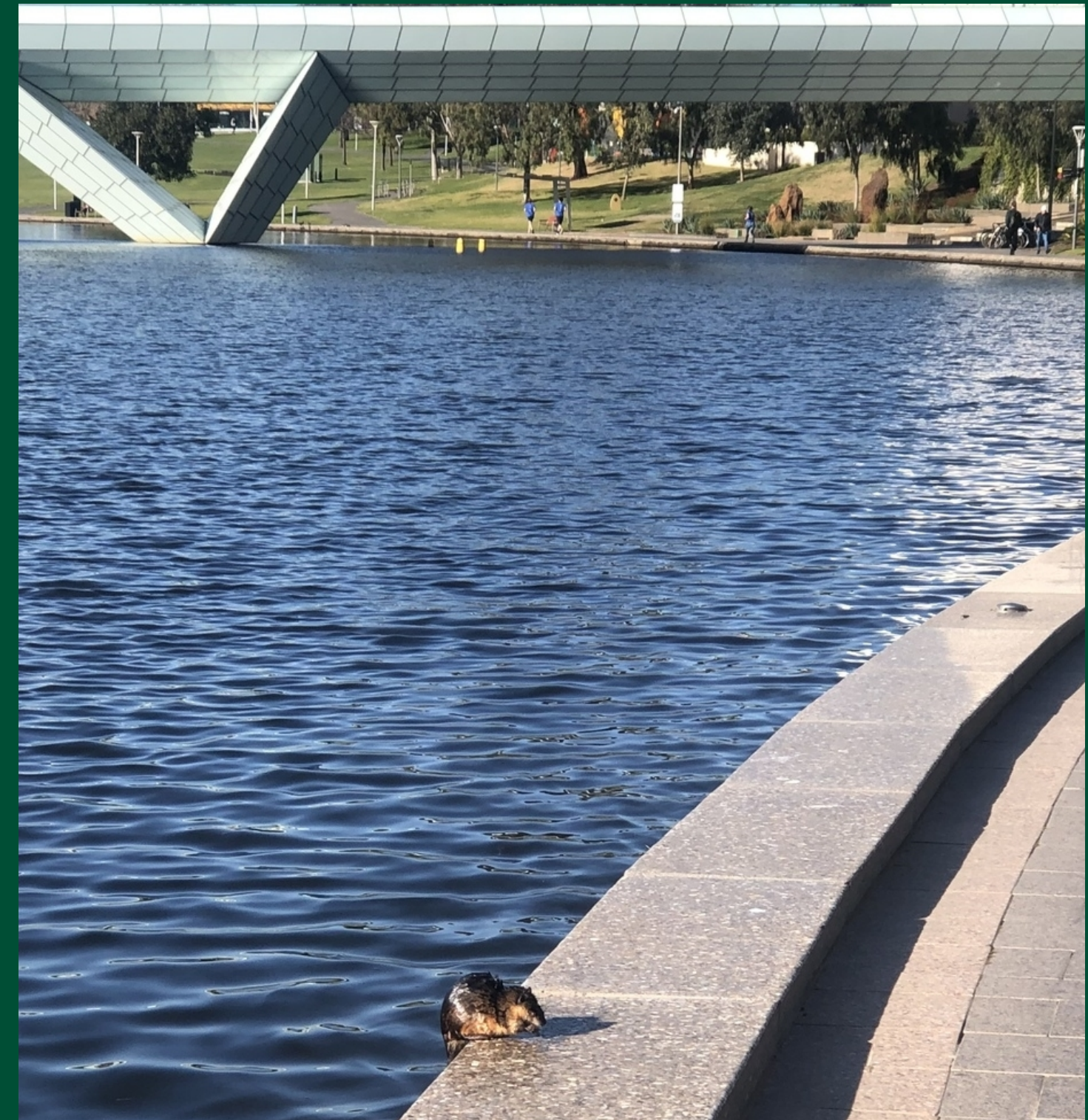
Observations



Eastern Water Skink



Rakali – Iarissa_i



Rakali - palaland

Observations



Rakali observed 27/7/25 – chuditch
iNaturalist south of Frome Road Bridge

Observations



Rat



Mouse

Observations



Possum - *Pirlta*



Possum - *Pirlta*

What we didn't see

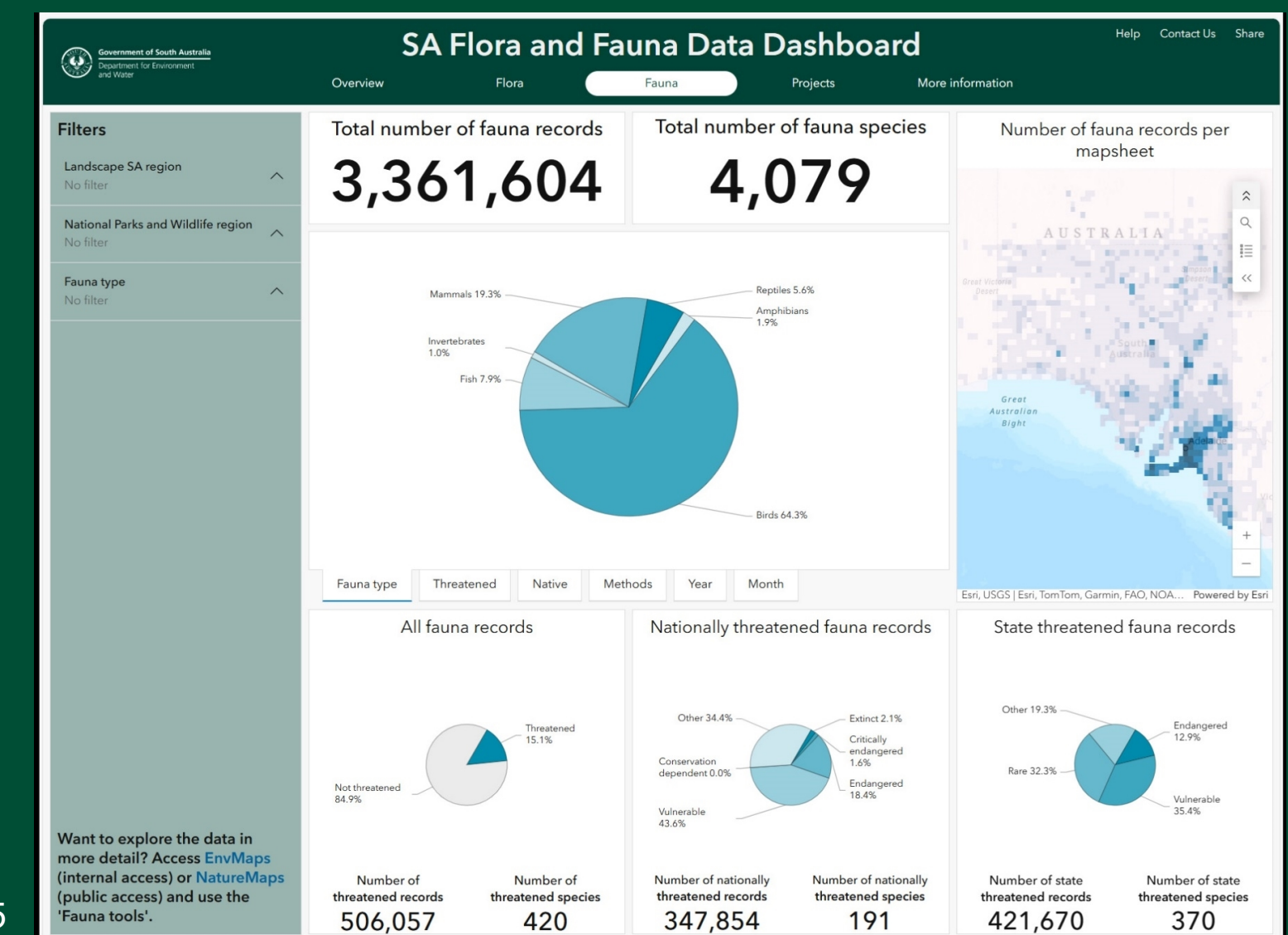
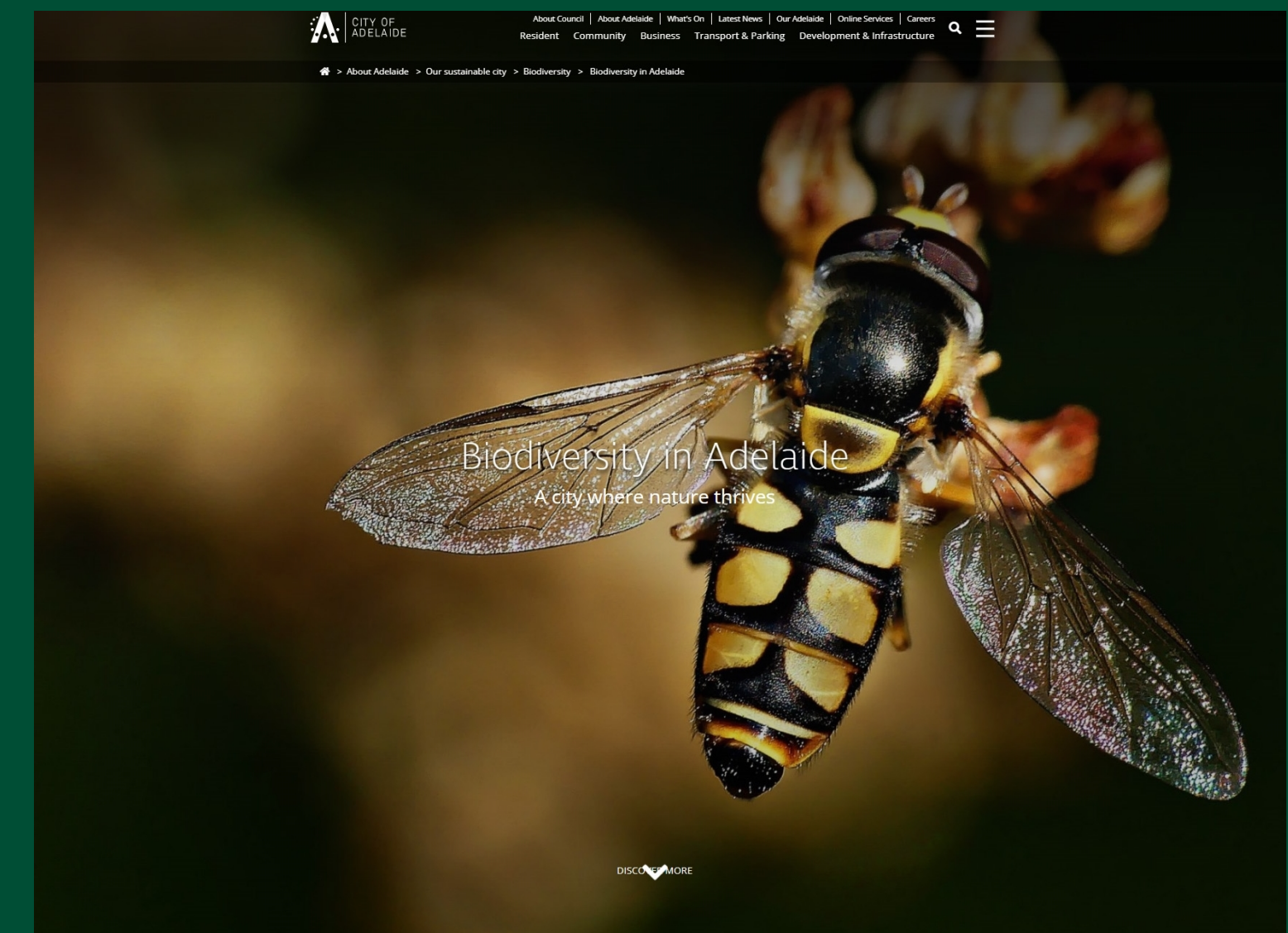


Recommendations

- Ongoing seasonal and long-term surveys with consistent methods to allow future comparison
- Integrate more acoustic monitoring - effective for birds and bats
- Continued weed control and pest monitoring
- Investigate methods to mitigate the abundance and impact of noisy miners
- Investigate additional tools (DNA sampling) to allow better targeting of surveys and locations
- Support citizen science activities backed by standardised methods for species identification

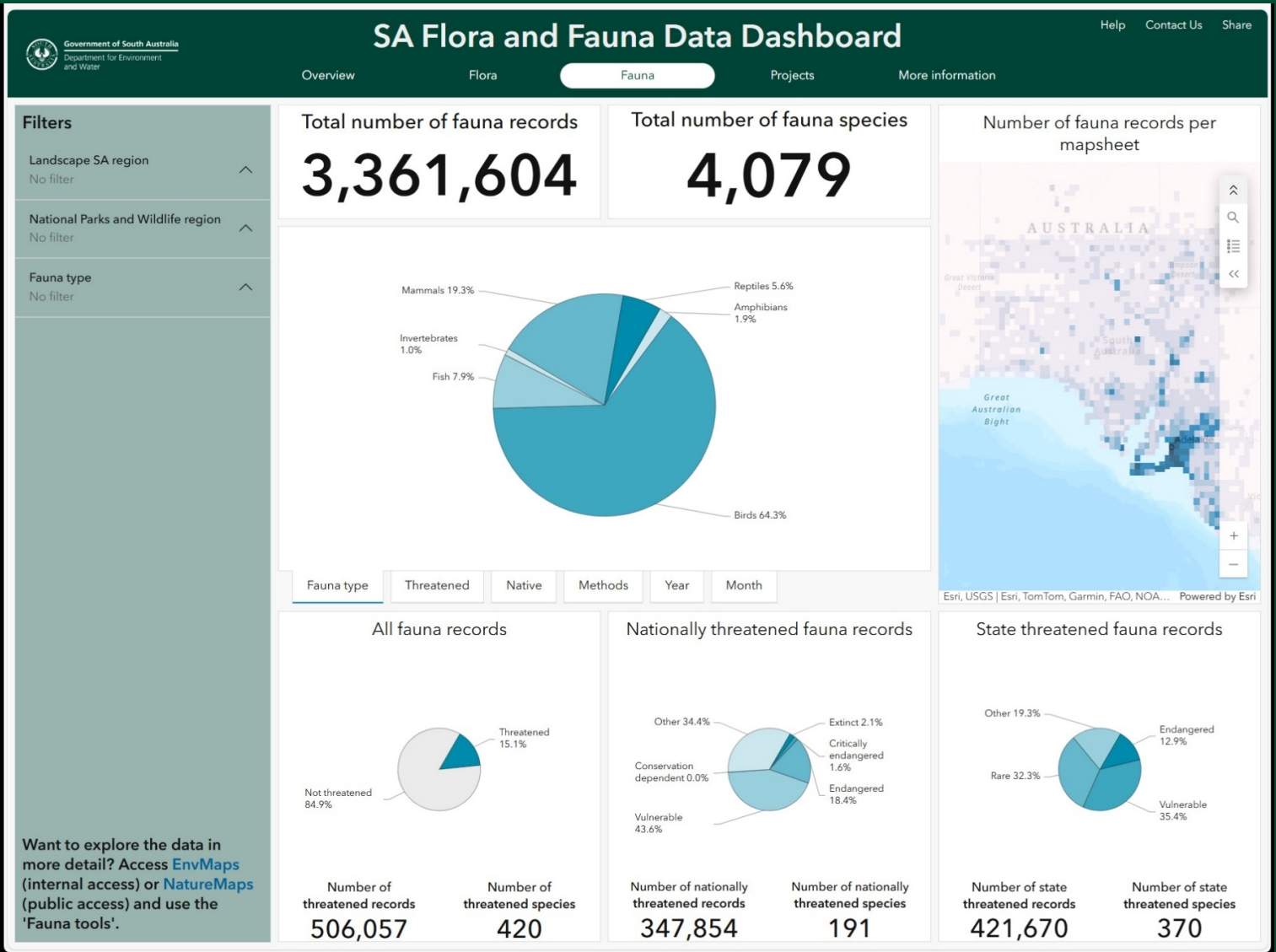
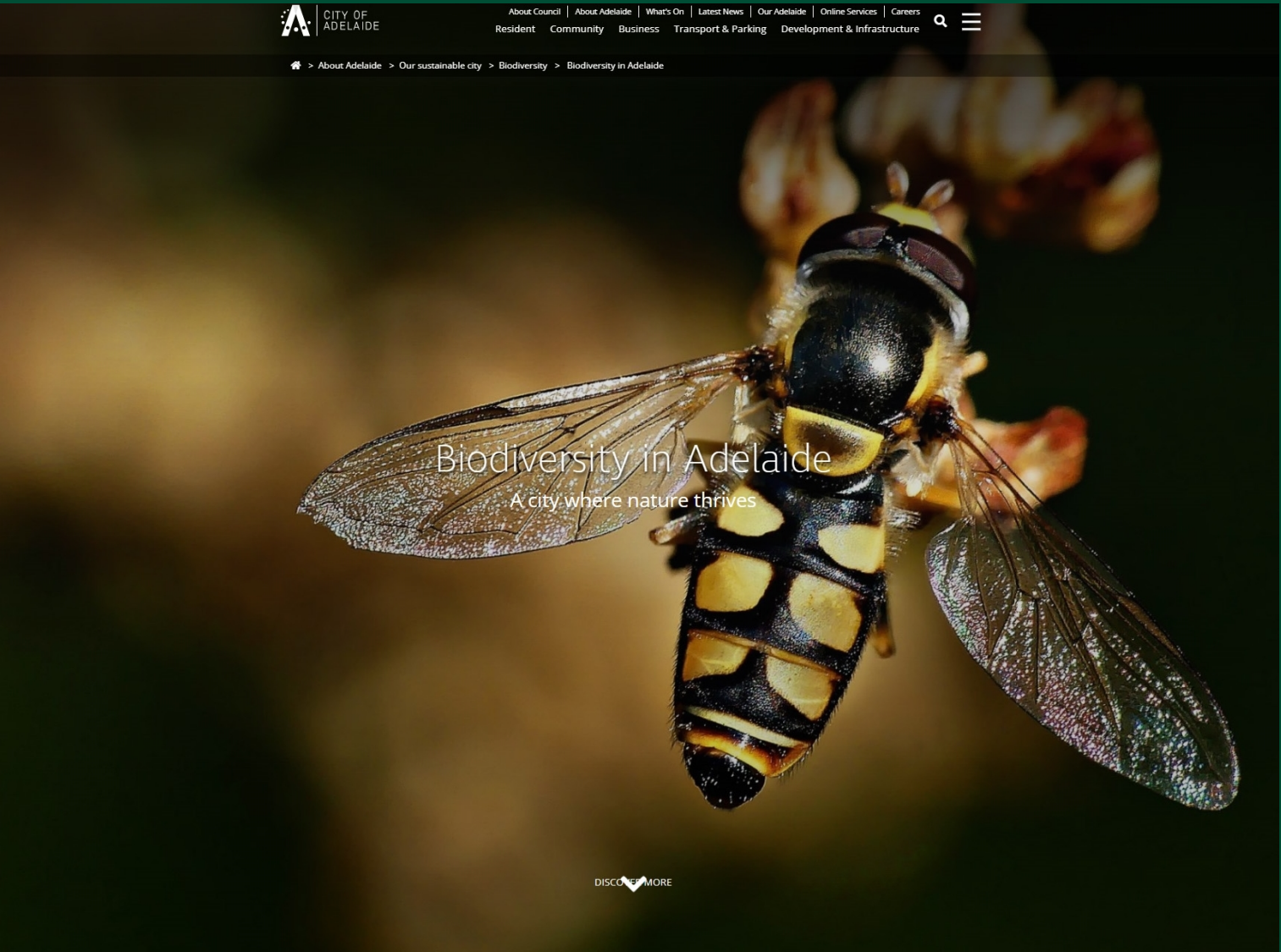
Biodiversity Program 2025/26

- Key Biodiversity Area (KBA) Management Plan Updates #1- #6
- New Key Biodiversity Area #7 Management Plan
- Tree Martin Management Plan
- Spring 2025 environmental DNA testing water and soil samples
- City Nature Challenge April 2026
 - 2025 results 3.3M globally
 - 4,136 Observations, 1,083 Species, 328 People from Greater Adelaide Region
- Adelaide Park Lands iNaturalist project is growing
 - 14,782 Observations
 - 1,307 Species
 - 1,643 People



Next Steps

- 2025 survey information published to the Biodiversity in Adelaide website
- Dataset uploaded to Biodiversity Database of SA and Atlas of Living Australia in September update
- Results shared and promoted during Nature Festival 26 September – 12 October 2025.



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Ngaityalya (Thanks)

Kadaltilla

