

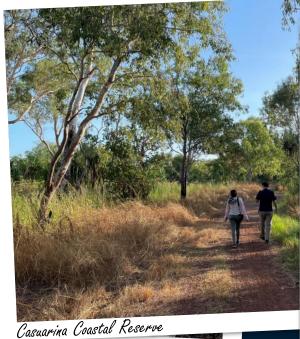
Adam Liedloff, Emma Woodward and Lorraine Williams

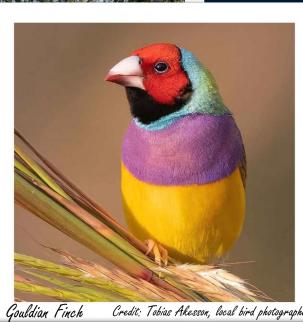
Darwin Living Lab Symposium 2023

We acknowledge the significant contribution to this project by Larrakia People and the broader Darwin Community and appreciate their strong desire to share their values of Larrakia Country. We extend the invitation for everyone to experience the rich, tropical biodiversity on Darwin's doorstep, such as the old-growth savanna woodlands, and recognise the community's desire to protect these natural places.





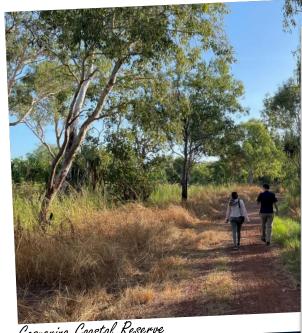




Credit: Tobias Akesson, local bird photographer









Gouldian Finch Credit: Tobias Akesson, local bird photographer





Australia's National Science Agency

A Darwin Living Lab Project



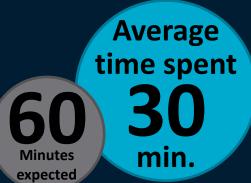






Lorraine sharing ethnobotanical information





177 answered

Online Survey









Would like to learn more about Darwin's biodiversity.





Protect and conserve Darwin's biodiversity.



Conserve Darwin's lifestyle.



Know more about Country.



Have work that is related to biodiversity

#### How do they know about biodiversity?



Being in the environment



Self learning, interest or hobby



By living and growing up in Darwin

#### How do they learn more about biodiversity?



Observing by being in nature



Read books, watch videos or podcasts etc



Join interest group to share and learn from others



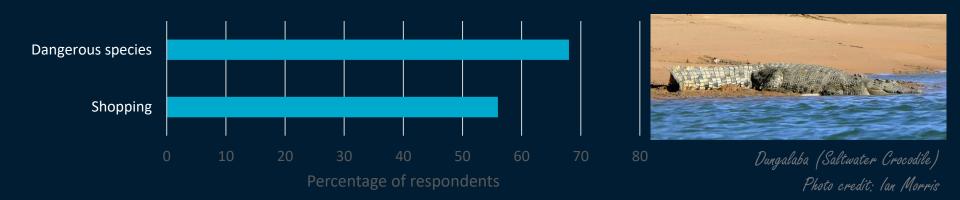
Follow the scientific literature



### We gave a list of topics and asked, "What affects the liveability of Darwin?"

#### What doesn't affect liveability?

168 answered. Largest "No affect" responses





#### We gave a list of topics and asked, "What affects the liveability of Darwin?"

#### What reduces liveability?

168 answered. Largest "Reduces liveability" responses

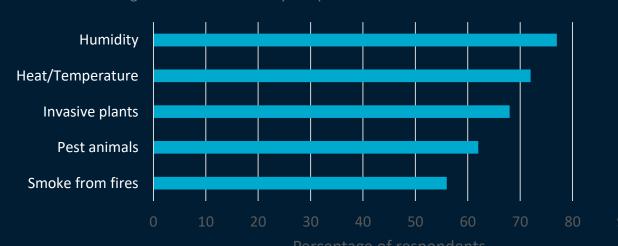
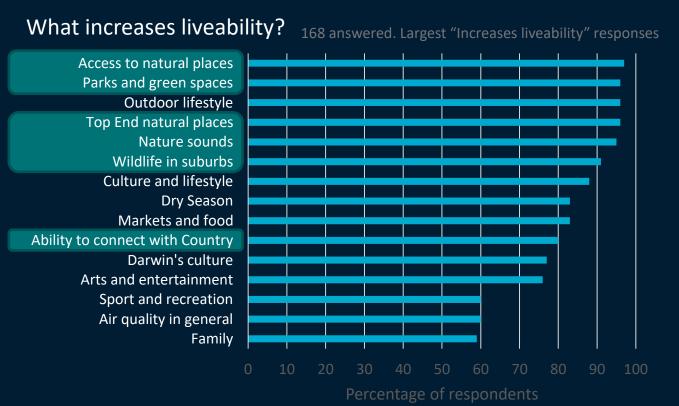




Photo credit: Adobe stock photos

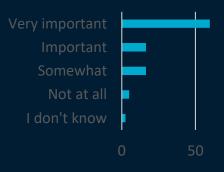


### We gave a list of topics and asked, "What affects the liveability of Darwin?"



To what degree does the biodiversity of Darwin affect your decision to live in Darwin?

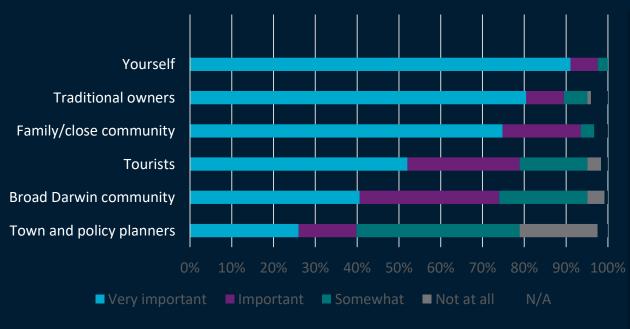
122 answered

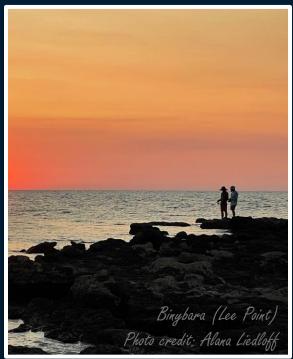


A Darwin Living Lab Project



So, how important is Darwin's biodiversity to others? 123 answered





### Larrakia-led biodiversity values of Darwin

Favourite places

- When people visit, how often, and why?
- What prevents visits
- Changes noticed
- Management needed

110
People shared

190
Favourite places

Location	Times shared
Casuarina Coastal Reserve	44
Lee Point	22
Freshwater (Rapid Creek)	20
Nightcliff Foreshore	20
East Point	17
George Brown Botanic Gardens	10





What is important to you for making Darwin liveable? 149 answered

The second of th

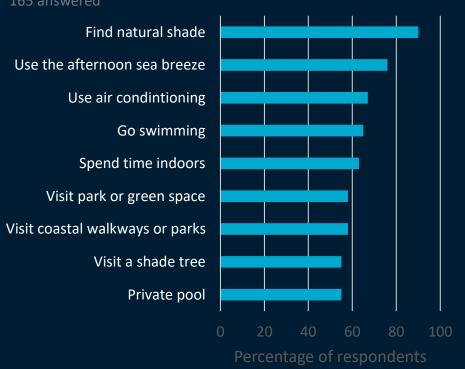
Are there any outdoor places around Darwin where you go to keep cool?



### Larrakia-led biodiversity values of Darwin

# Keeping cool

165 answered





Trees make difference to temperature of city



People use trees for shade



There should be more trees



### Larrakia-led biodiversity values of Darwin

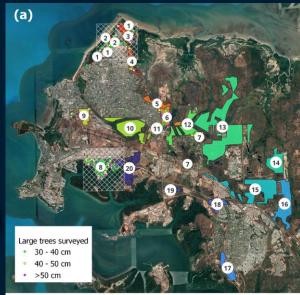
### Community interest in old-growth savanna

- Approached by community to help them better understand old growth savannas around Darwin
- Built a mobile-based field monitoring app for them

• People visited, measured and recorded every tree over 35cm diameter at breast height above 14m MSL.

 They now better understand the location and scarcity of old trees offering hollows for wildlife and the impacts of clearing













Do you think we currently manage biodiversity well in Darwin?



Are you personally able to protect Darwin's biodiversity in any way?



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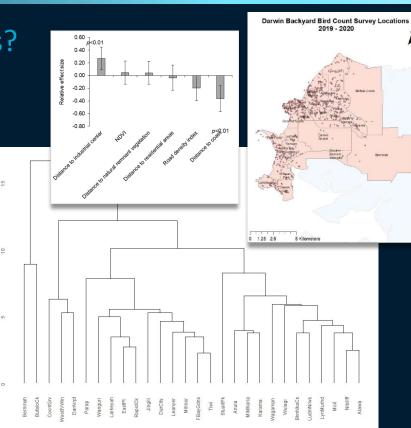
51 answered

### Larrakia-led biodiversity values of Darwin

#### What can we learn from Darwin's birds?

- Janani Rajakaruna's CDU Master of Environmental Management thesis (Supervised by Dr Brett Murphy)
- Using bird surveys as an indicator of biodiversity in Darwin City used citizen-collected Aussie Backyard Bird Count data
- Good bird diversity and abundance are found across Darwin
- Analysis suggests healthiest systems are away from urbanisation and associated with the coast and mangroves



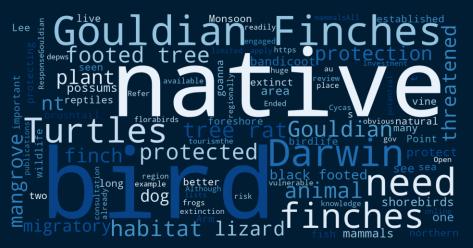




Are there any species that you are interested in seeing protected? 72 answered



Have you noticed any introduced or pest animals around Darwin?





### **Larrakia-led biodiversity values of Darwin**

# Findings so far

- Darwin's character is largely derived by natural and green places
- Easy access to nature is highly valued by the community and contributes to wellbeing in a place getting hotter and less liveable
- These natural systems are stressed by rapid urbanisation
- Aspects identified that threaten the community's Country, lifestyle and wellbeing include
  - Pests and weeds causing large fires
  - Climate change
  - Tree clearing
  - Restricted access to Country
  - Loss of natural, safe places to swim and keep cool
  - Lack of public transport to Darwin's natural places



Goanna, Photo credit: Ellen Rochelmeyer, CSIRO



# Thank You.

# For more information

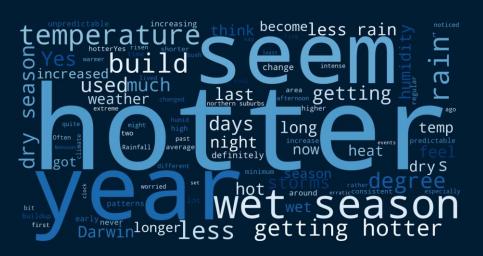
- Follow us on Darwin Living Lab's website where updates will added to the Larrakia-led biodiversity values page as reported
- Email me adam.liedloff@csiro.au



The following pages provide further word cloud analysis of the responses to a number of openended questions in the online survey. These images provide an intuitive way of exploring what people said and which words were most important based on the frequency of use.



Have you noticed any change in the climate? 146 answered



What do you think changes in weather and climate mean for living in Darwin?





What could be done to improve the health of these places? 86 answered

Lee point year development provide native bushland look protect grass

Tead development provide native bushland look or value by value by

#### What locations need more trees?







Do you think current fire management around Darwin impacts biodiversity?



Are there any habitats you think are impacted by fires?



think is Dickward year list unsure and the standard of the sta

50 answered



Do you have any favourite plants and animals? 78 answered

Reptiles less less properties particularly goalnas planning planning planning planning planning planning planning point properties point properties proper

#### Do you have any favourite trees?

