



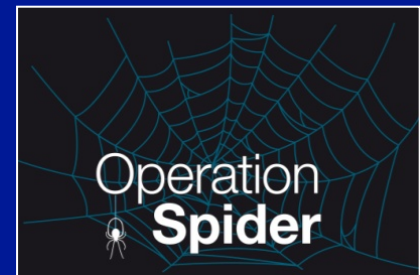
Creating Biophilic Cities through Citizen Science



Philip Roetman, Research Fellow
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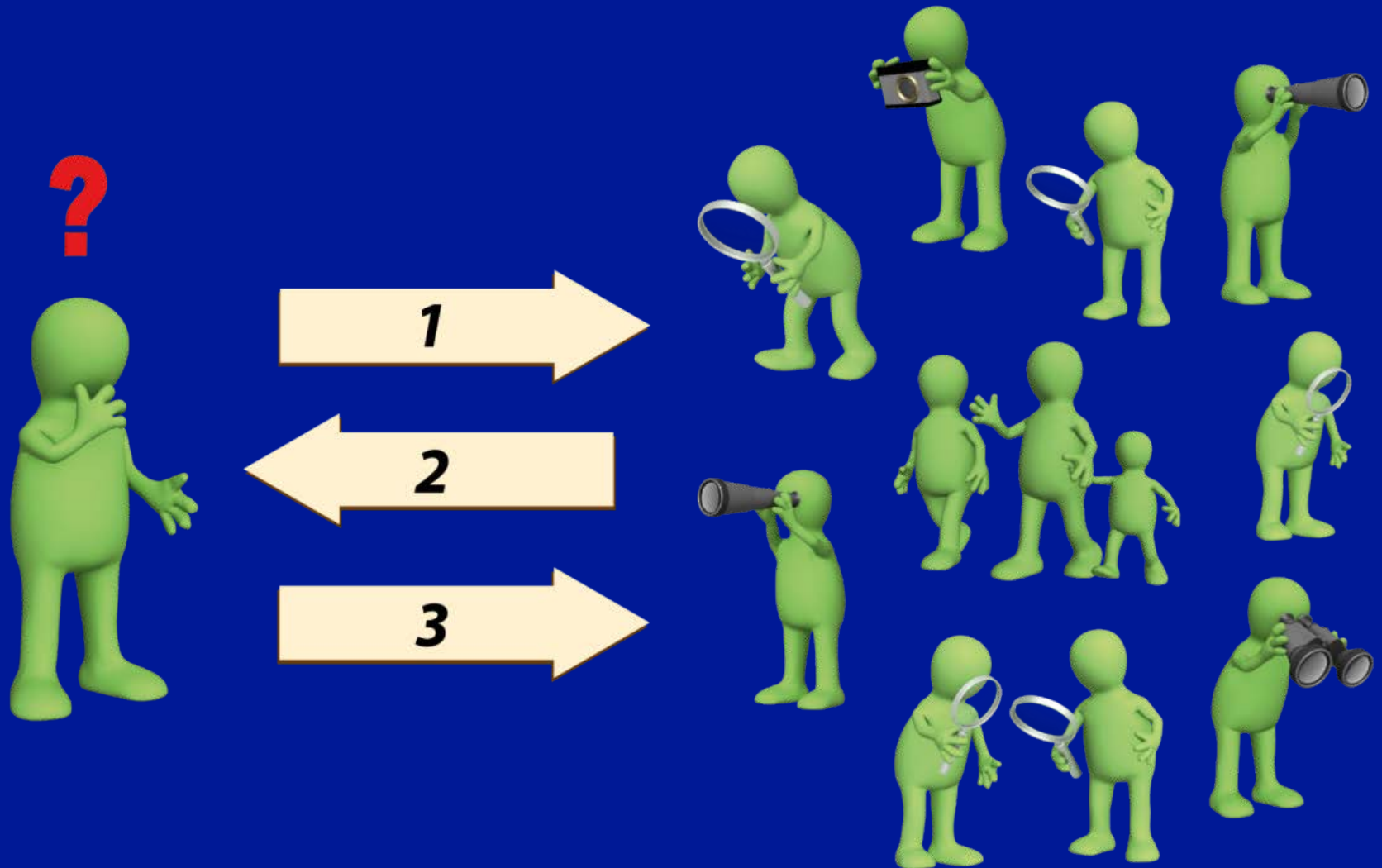
Inspiring stewardship through citizen science

- Exchanging information
- Inspiring who?
 - All ages?
 - In schools?
 - Attitudinal baggage?
- Impact on participants (& onlookers)
- Giving it back

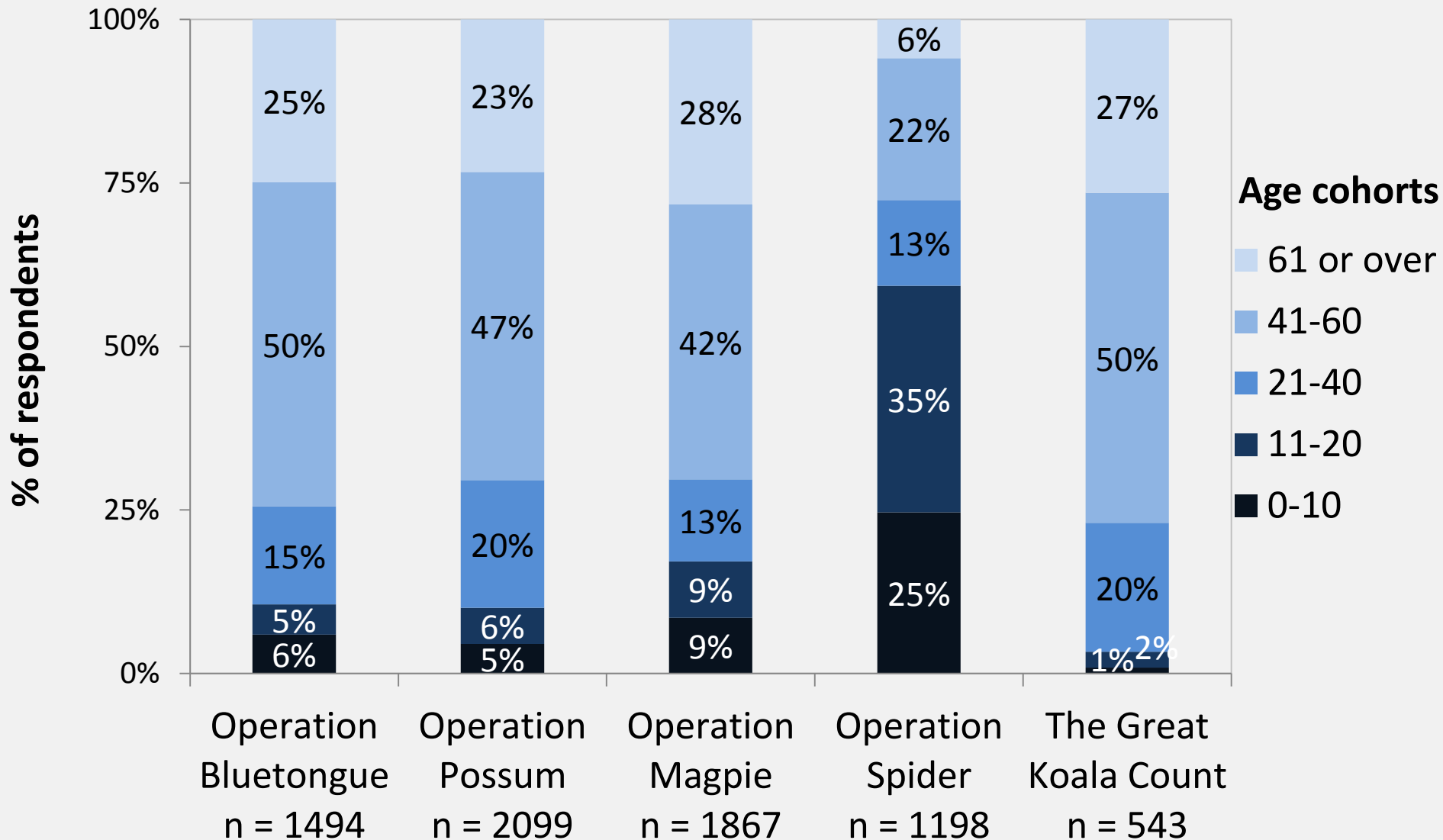


Citizen Science:

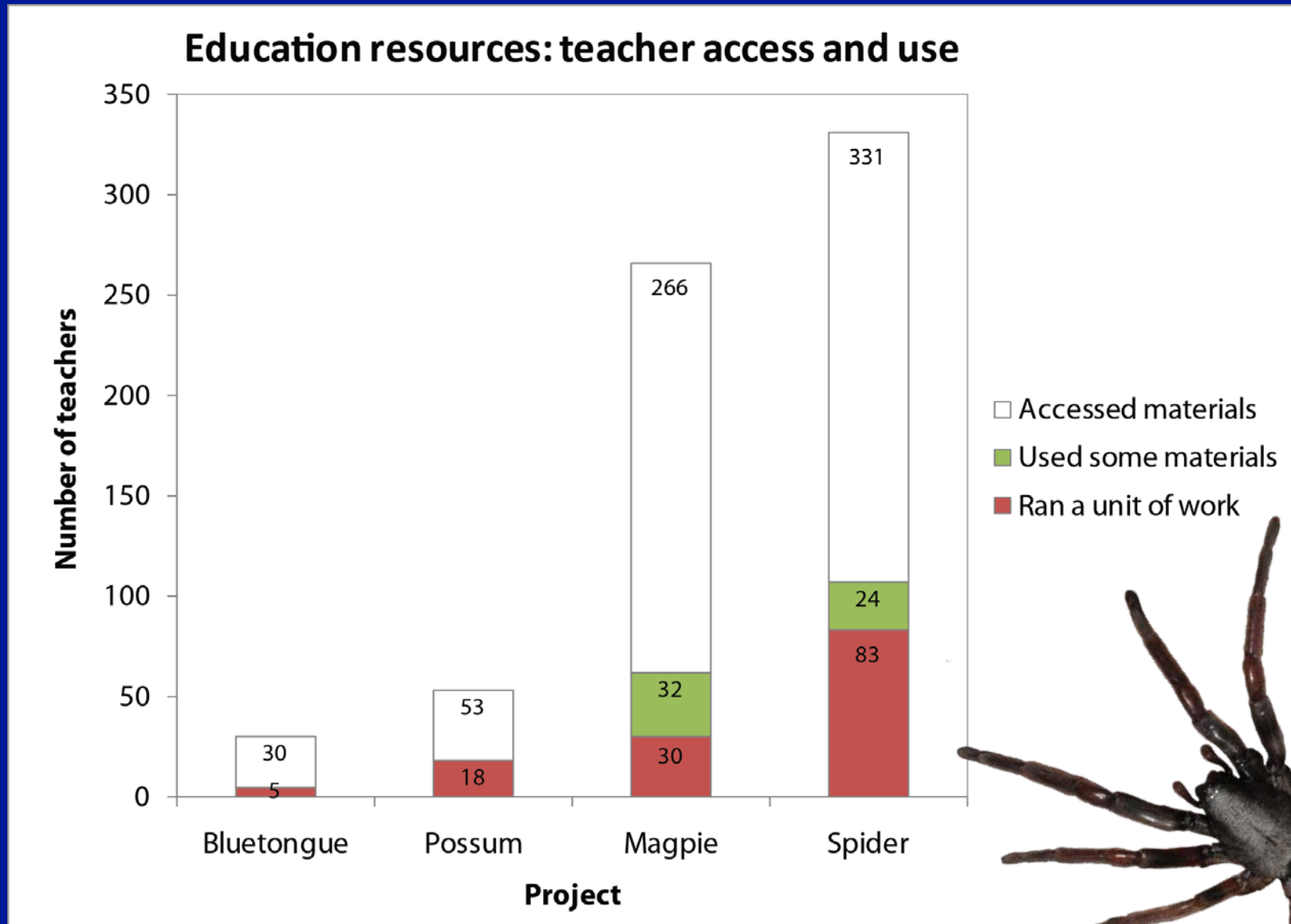
The information exchange



Inspiring **who?**



In schools?



In schools?

- Attitudes and Childhood

(Chawla & Cushing 2007)

- Knowledge and experience

- Realm of experience (the topic!)

- Resource Connectivity

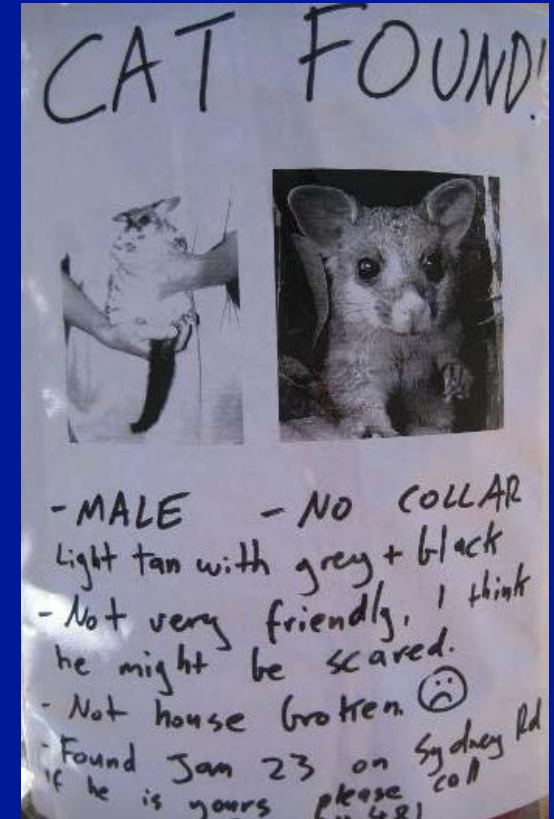
- Interactive Teaching Sequence (Faire & Cosgrove 1993)

- Curriculum

- Other frameworks (e.g. 5Es)

- Availability of resources + people

- Partnership approach (e.g. Paige et al .2010, 2012, 2014)



Inspiring **who?**

Spider (385 likes)

Women

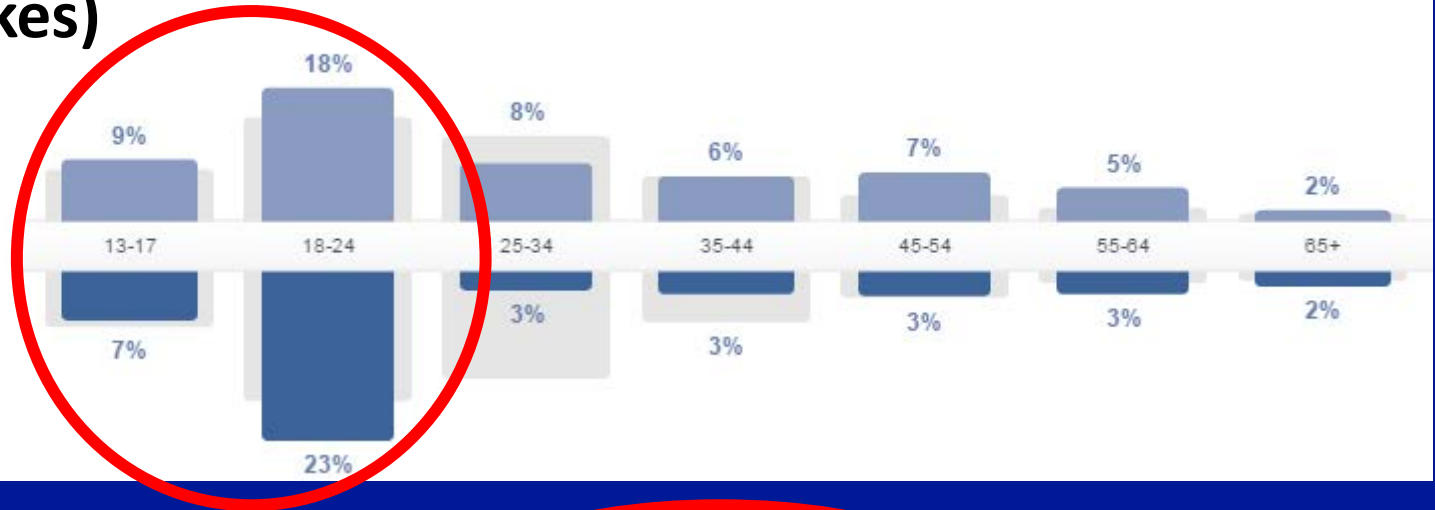
■ 54%
Your Fans

■ 46%
All Facebook

Men

■ 44%
Your Fans

■ 54%
All Facebook



Koala (957 likes)

Women

■ 71%
Your Fans

■ 46%
All Facebook

Men

■ 27%
Your Fans

■ 54%
All Facebook



Attitudinal baggage?

Possum management... The GOOD



“We had possums in our roof when we bought this house...They were urinating and defecating in the roof and fighting for territory and upsetting our dogs ... We found out ... that if we could entice the possums out of the roof and into the box we could then close off the holes in the roof and keep them outside. In fact this worked a charm...One possum in a box outside keeps other possums from coming into his territory”

Attitudinal baggage?

Possum management... The BAD



“My eldest son blocked off the entrance to the roof at midnight a couple of nights ago, but unfortunately the possum was still in the roof. At about 1:30 this morning there was a noise from our bathroom. Upon opening the bathroom door a possum fell through the shower vent after it had pushed it out. As the other two members of the household were too terrified to open their bedroom doors, it was left up to me to rescue the animal. This I did by utilising a couple of crab nets... Throughout the ordeal both of us remained relatively calm!!!.....or both terrified of each other!”

Attitudinal baggage?

Possum management... The UGLY



*“This is no favourite story - its a horror story called **The Possums**. We have lived at our house for about 25 years. In that time I have trapped more than 100 possums- I’ve given up counting. In one 18 month period in the early-mid 1980s, I trapped 30 possums. I’ve caught two by hand - one in the bathroom, and one outside on the trunk of a tree.*

*Last night there were 4 of the P***** outside - two demolishing what’s left of an apricot tree, another nearby digesting the apricot leaves, and another that I only heard scrambling up a tree when I came out with a cricket bat.”*

Impact of the Operations...

Project	observed more	learnt new things	More interested	changed behaviour
Operation Magpie (n=173)	39%	41%	42%	21%

Impact of the Great Koala Count...

(Hollow et al. 2014)

	learnt new things	changed opinions
Participants (n = 454)	65%	19%
Onlookers (n = 82)	63%	38%

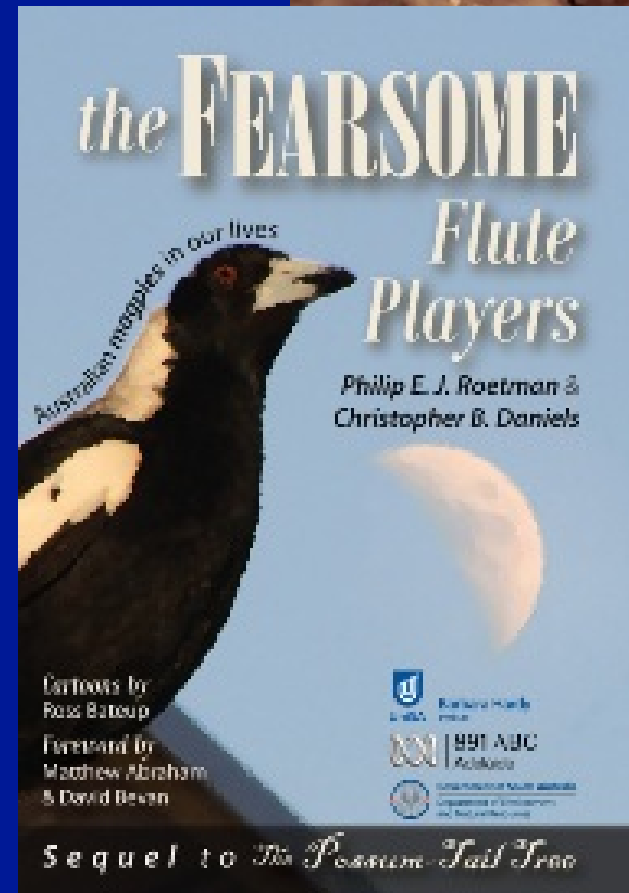
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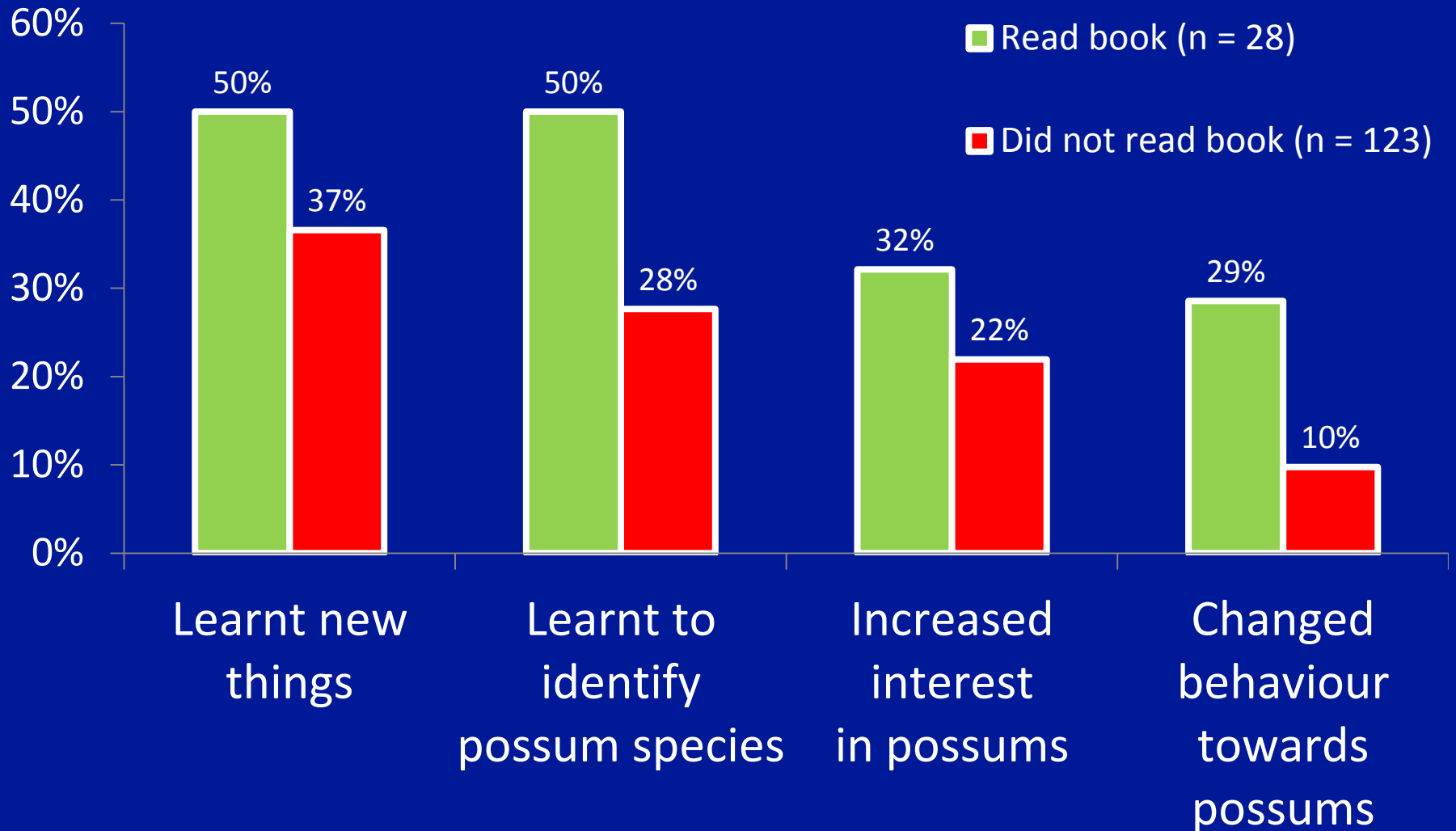
reach
472
26,000+

Impact on the community

- Hands-on activities
- Contributing to research
- Fun
- **Giving it back**
 - Voice of the community
 - Social science literature
 - Braided narrative



Changing attitudes and behaviours...



Improving the model

- Deliberate design
 - Topics
 - Resources
 - Activities
- Converting onlookers
- Giving it back
 - Web-based
 - Further analysis
 - More participant-generated material



**BioBlitz
Events**



**Cat
tracker**



**Little
corellas**



**Fluker
posts**



**Birding
the 'burbs**

The **sound** of Australia...

“When we lived in England for ten years in the 80s, the TV was on in another room. It was an Australian programme and I could hear a magpie in the background. I burst into tears, realising that magpie song is for me the sound of Australia and I would have to return home!”

Operation Magpie participant





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