

Protecting walpajirri/ninu (the bilby) and its habitat across the arid zone of the NT

Kelly Dixon



Bilbies are important

- Culturally
- Ecologically

They are declining





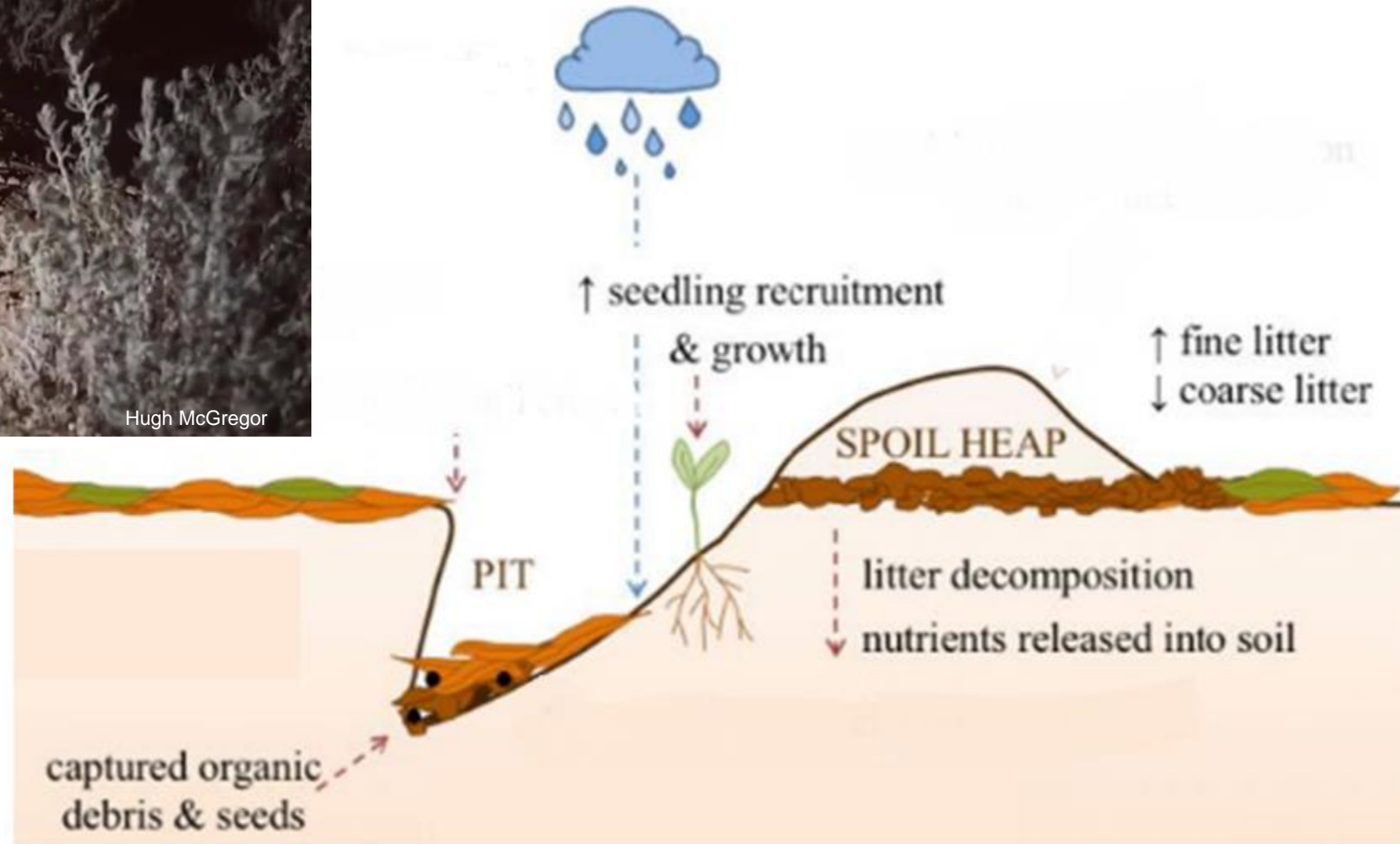
Threats



Ecosystem engineers



Hugh McGregor











Bilby project

Collaboration with ranger groups and TOs

Bilby surveys

Baseline data

Ongoing monitoring

Fire management for food plants and habitat

Predator surveys & management (foxes & cats)



CENTRAL LAND COUNCIL



Planning



Bilby surveys 2020

Lajamanu

Mount Frederick
area



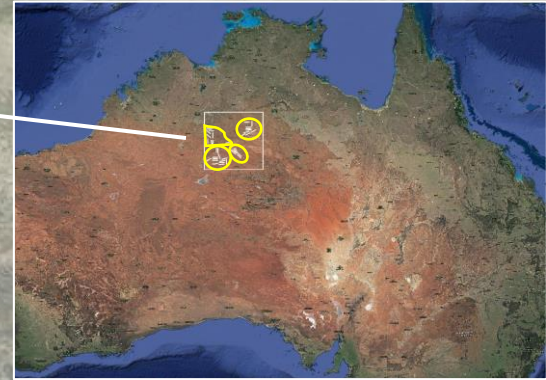
Lawaripa



Pirti Pirti

Near Sangster's bore
>30 rangers and TOs

Alice Springs



How do we survey?

Helicopter
On-ground 2ha plots



Pre-planned 35km transects



Low and slow



Looking for signs of bilby burrows, diggings and tracks



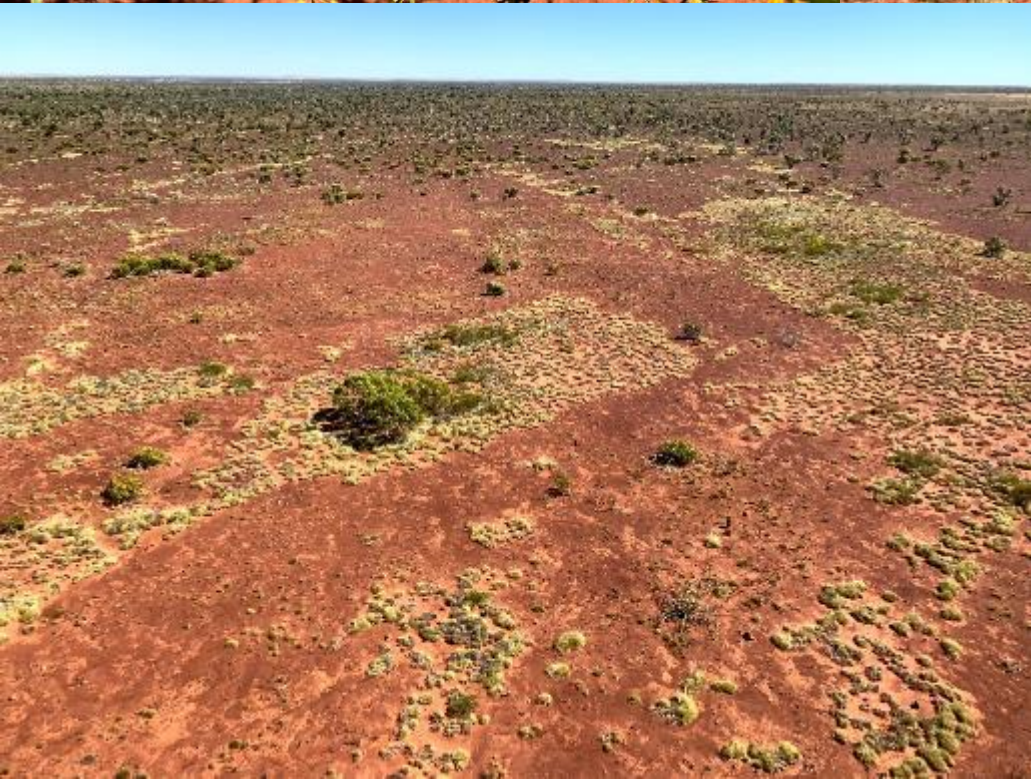
Get on-ground to confirm



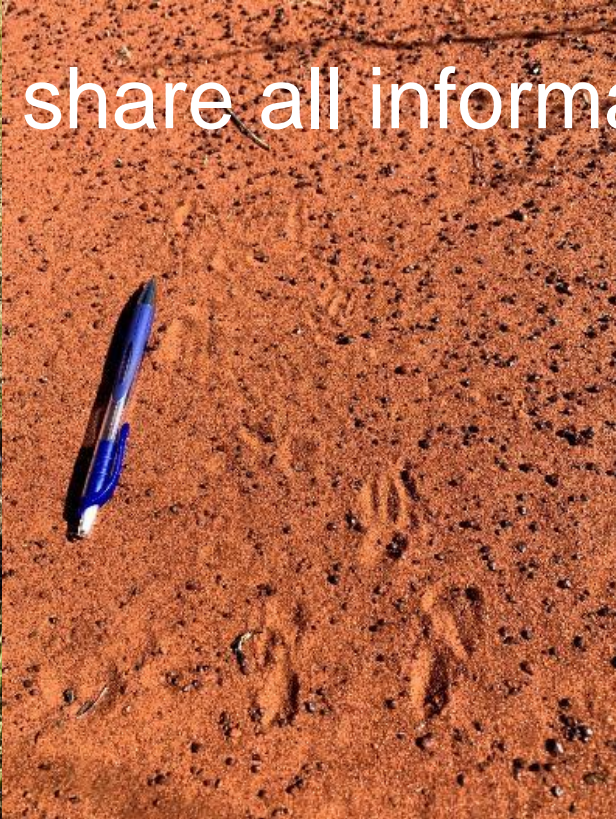
Walk 2ha plots looking for signs



Record everything on an app and GPS



Map maps and share all information with CLC



Results from 2020 surveys |

- 1,310km of transects flown
- At least 13,100 hectares surveyed
- 57 active bilby burrows confirmed on 14 transects
- 41 old burrows found, including on 9 transects where no active burrows were found
- 15 transects no bilby sign found
- Five fox dens, all on one transect near Sangster's bore
- Camel sign on most transects
- We saw two cats and a few transects had cat prints
- Max distance = 153 m from transect, average = 30 m

Bilbies and fire

- Smaller fires can ↑ habitat and resource availability for bilbies
- Bilbies need some longer unburnt plants for protection from predators while they are foraging
- Hot fire followed by good rainfall can make key bilby plant foods grow
- But too much fire can kill them



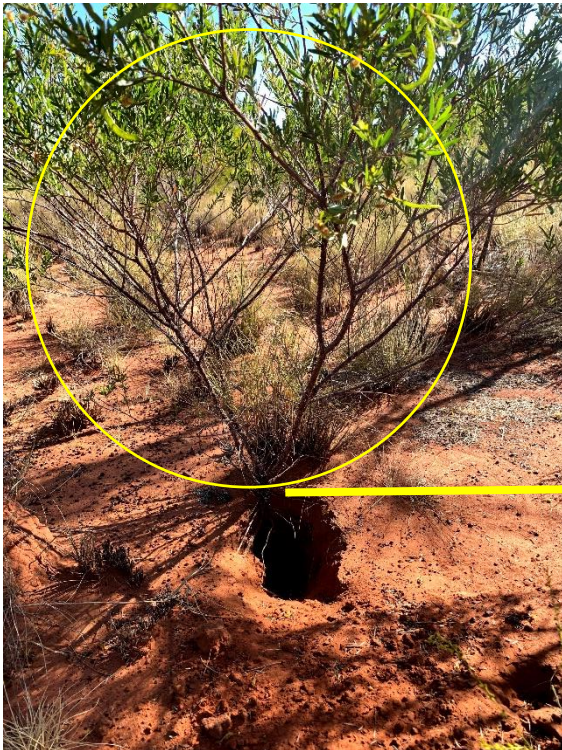
Yakirra australiensis var. *australiensis*



Photo: C.P. Campbell

Bilbies and fire

- Fire can kill shrubs that contain grubs in their roots which are a very important food for bilbies
- These shrubs need a long time to regrow after fire



Skroblin *et al.* 2017





Going forward

TNRM will support CLC ranger groups and TOs to undertake:

- More bilby surveys to identify extent across the NT range
- Scat collection to find out how many bilbies live in an area (DNA analyses)
- Fire management to promote bilby food and help stop wildfire near bilby populations (use data collected in these surveys)
- Fox and cat control near bilby subpopulations





Australian Government

**National
Landcare
Program**



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