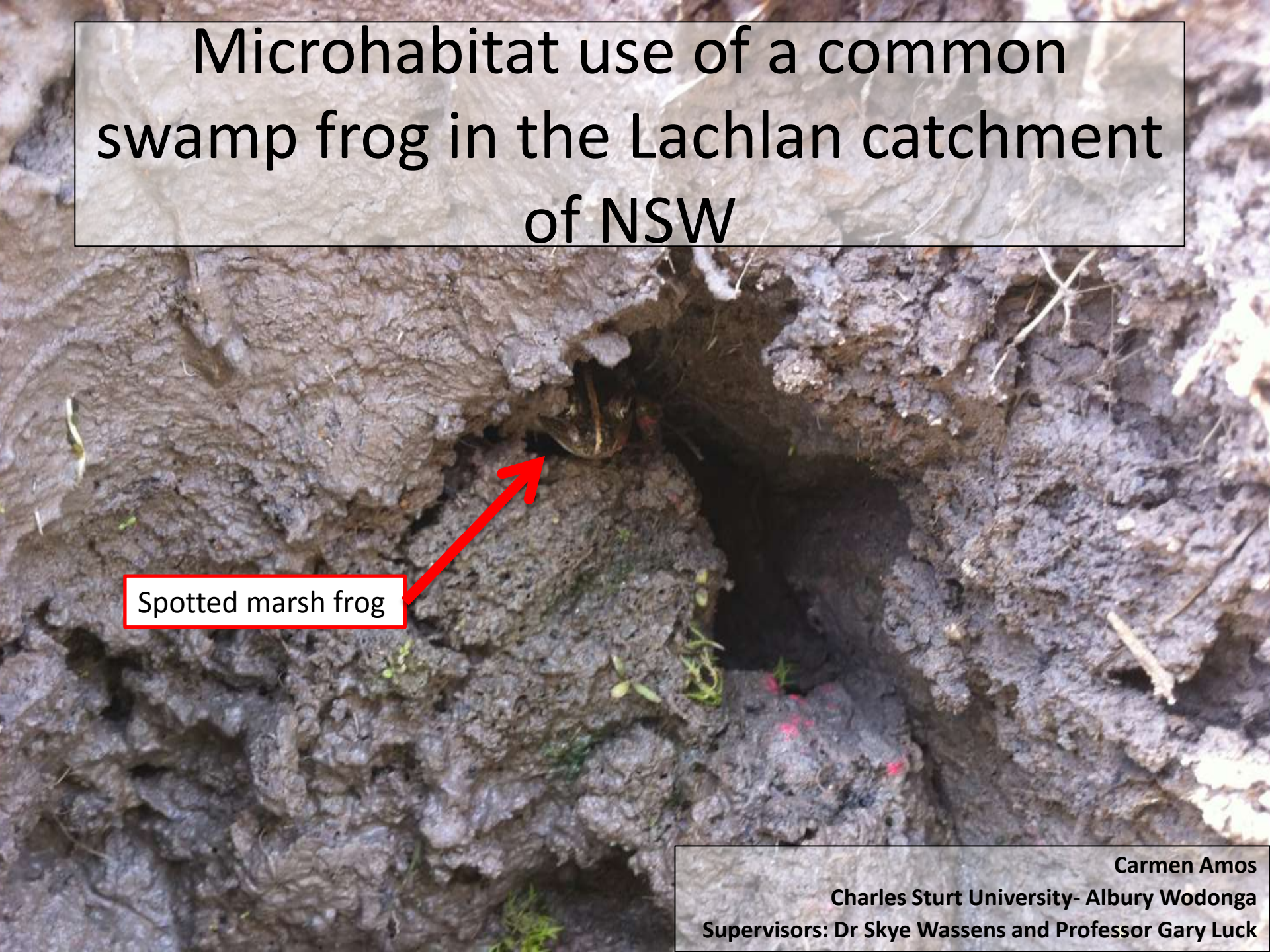
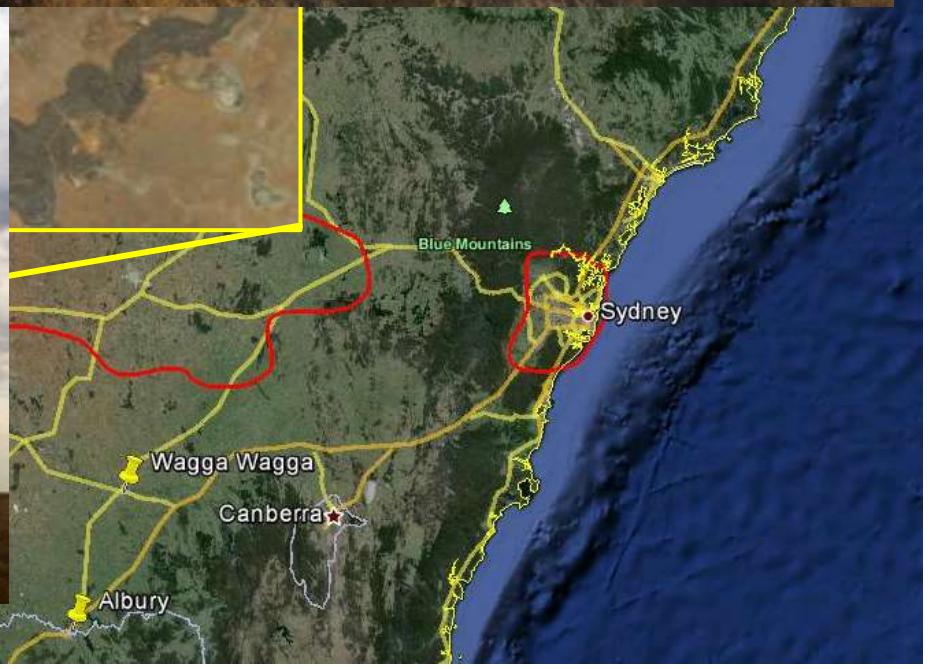
Microhabitat use of a common swamp frog in the Lachlan catchment of NSW



Carmen Amos
Charles Sturt University- Albury Wodonga
Supervisors: Dr Skye Wassens and Professor Gary Luck

The Lachlan Catchment



In semi-arid environments habitat can rapidly change

6 months

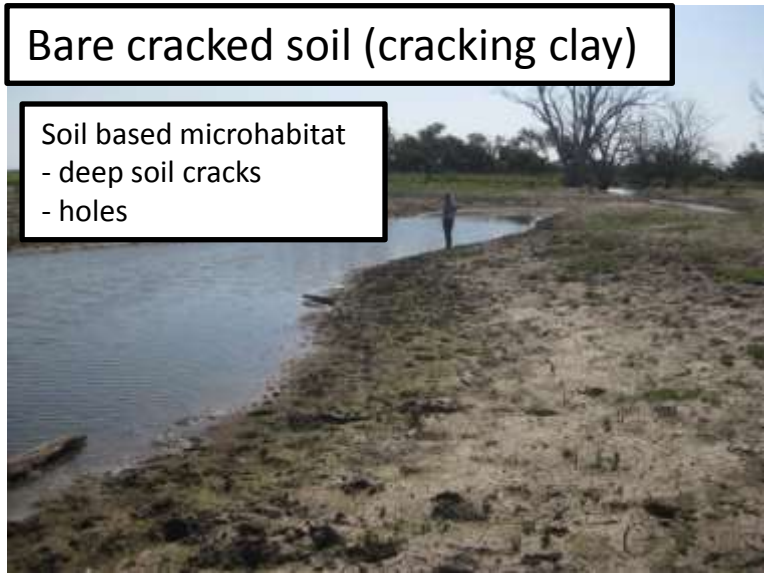
Spotted marsh frog
Refuge dependant species

Giant Banjo
Burrowing s

Microhabitats/wetland Sites

Bare cracked soil (cracking clay)

Soil based microhabitat
- deep soil cracks
- holes



Vegetation

Course woody debris

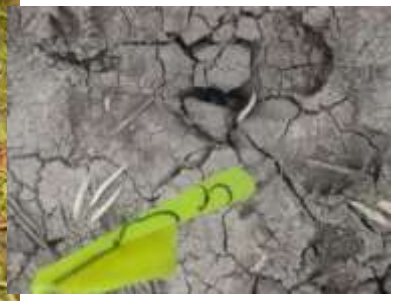
Mix

Methods – Night one

researcher

Catch frog, weigh, measure and apply powder

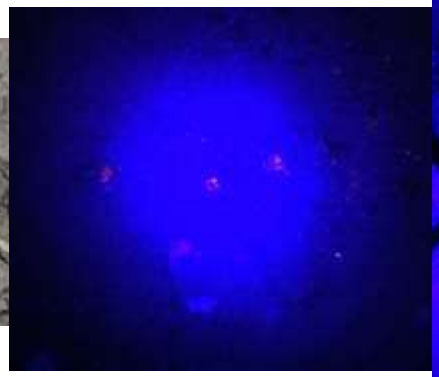
Release at capture point

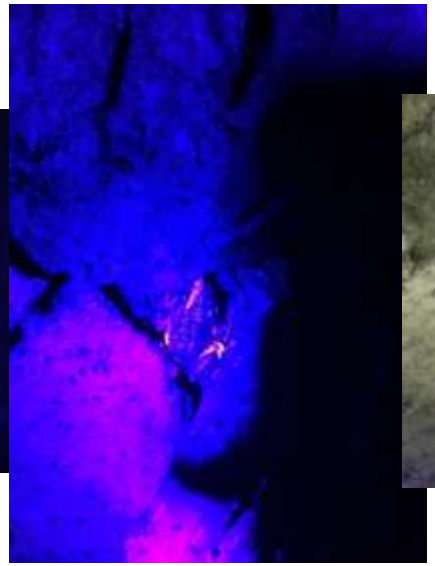


mark

Methods – Night two & day three

Back to marker

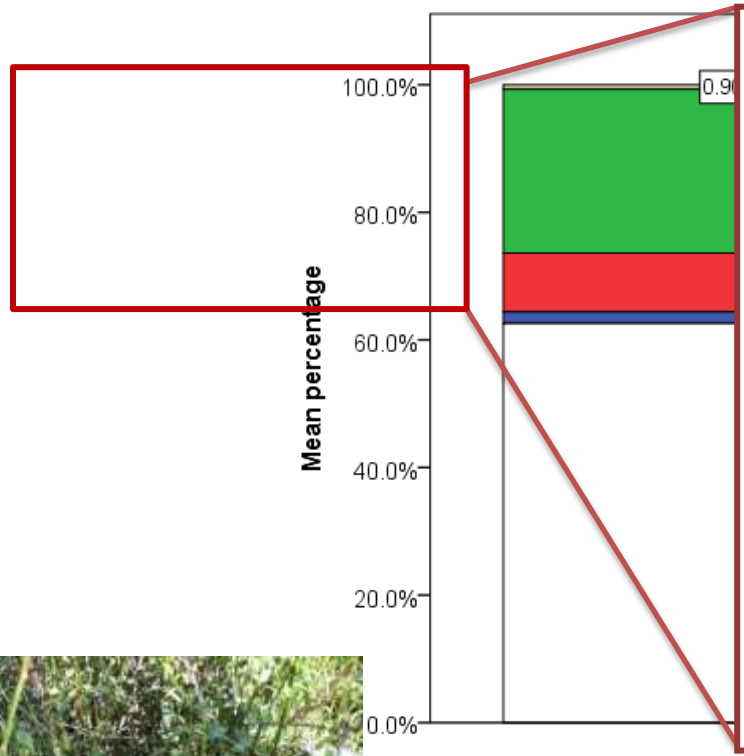




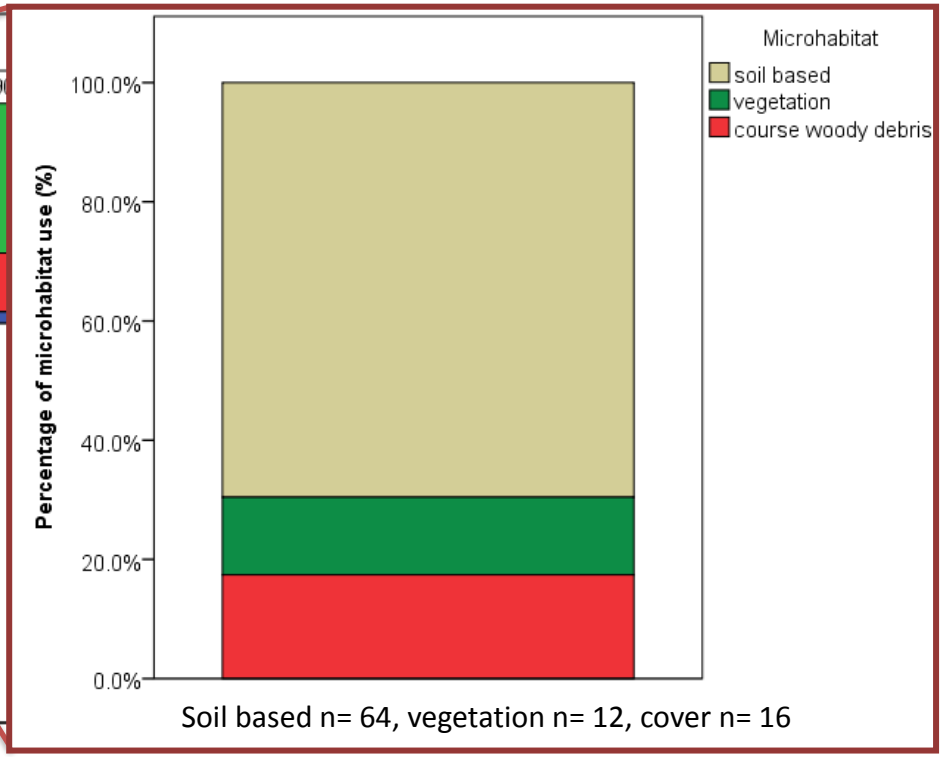
Use black light to track path to microhabitat

Record microhabitat type, surrounding habitat... etc

Available habitat October 2013



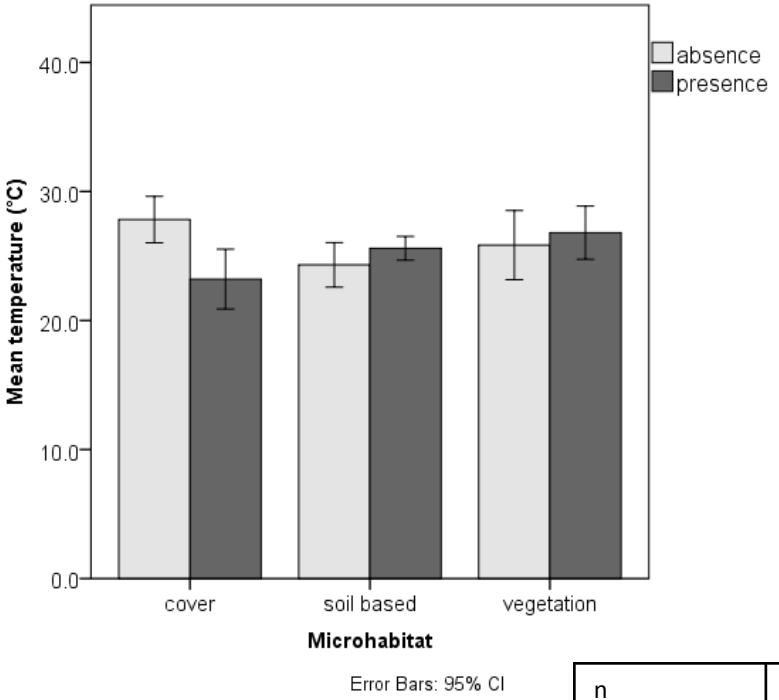
Percentage of microhabitat choice



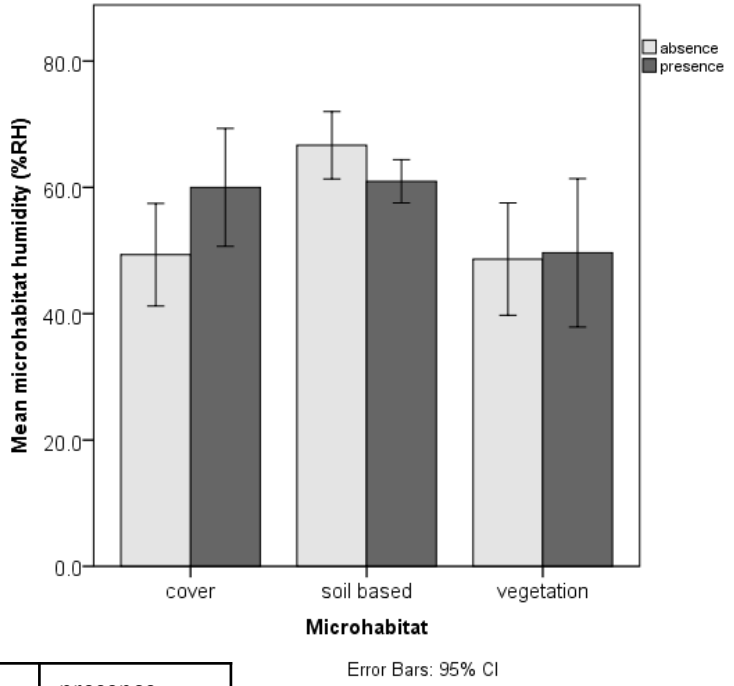
Soil based n= 64, vegetation n= 12, cover n= 16

Credit:

Temperature at microhabitat presence and absence



Humidity at microhabitat presence and absence



n	absence	presence
Cover	20	16
Soil based	19	64
Vegetation	9	12

Conclusion & management

- Frogs primarily use soil based microhabitats
- 50-60% humidity is important to microhabitat choice
- Temperature mid 20 degrees

- Leads to better management of water
- Understanding habitat use means we can prevent future losses

Giant banjo frog

Spotted marsh frog metamorph

Acknowledgments

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•Field staff: Amelia Walcott (CSU) and Amy Mclean (CSU)

• National Park (NP) Area Managers Silvana Keating (Hay NP) and rangers and administrative staff

•Landholders and property managers

Sudells frog

Eastern sign-bearing frog