



Wild dog movement behaviours in western NSW

Deane Smith, Paul Meek, Lucy Collingridge, Peter Fleming, Guy Ballard and Bruce Duncan



Department of Primary Industries



Local Land Services

The People

VPRU Staff

- Peter Fleming
- Guy Ballard
- Paul Meek
- Deane Smith
- Lucy Collingridge

Western Track Advisory Committee

- Leon Zanker
- Ben Bartlett
- Stuart Frazer
- Phil Baird
- Bruce Duncan
- Peter Fleming
- Erlina St Vincent
- Tim Wall
- Sam Doak

Partners

Wild dog & fox control associations, NSW Farmers, NSW NPWS, Local Land Services, Forestry Corp, MLA, AWI, CISS

Western Track Operations Group

- Phil Baird
- Bruce Duncan
- Brooke Anderson
- Dalit Hazell
- Paul Meek
- Deane Smith
- Sam Doak
- Darren Marshall

Trapping Team

- Matt Beach
- Will Bennett
- Wayne Preece
- Lachlan Marshall
- Bruce Duncan
- Darren Marshall
- Mim Bruggy
- Kagen Pearce



Local Land
Services



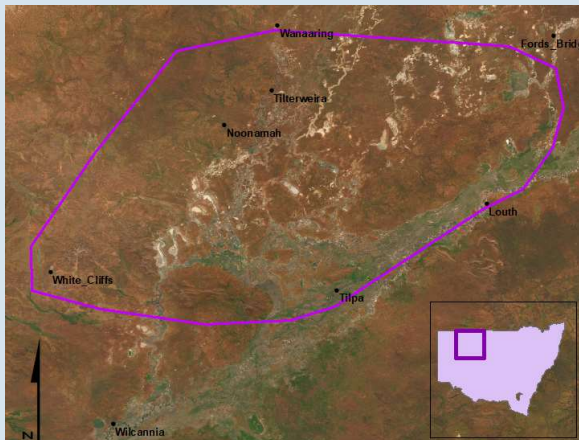
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The Plan

Objectives of the project:

- Capture and collar 30 wild dogs
- Study home range and activity in WNSW – first ever
- Produce home range estimates to understand how activity interacts with properties and control effort
- If possible assess efficacy of baiting on collared population



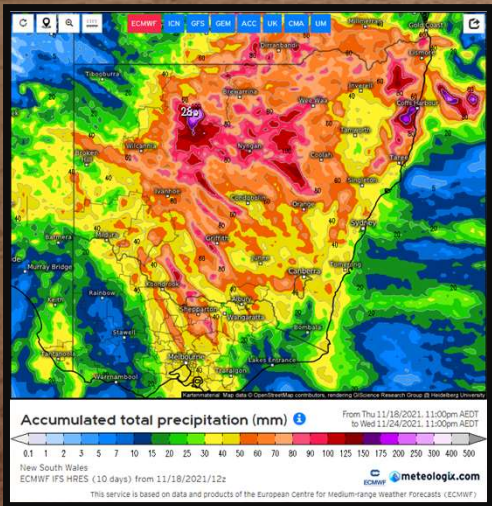
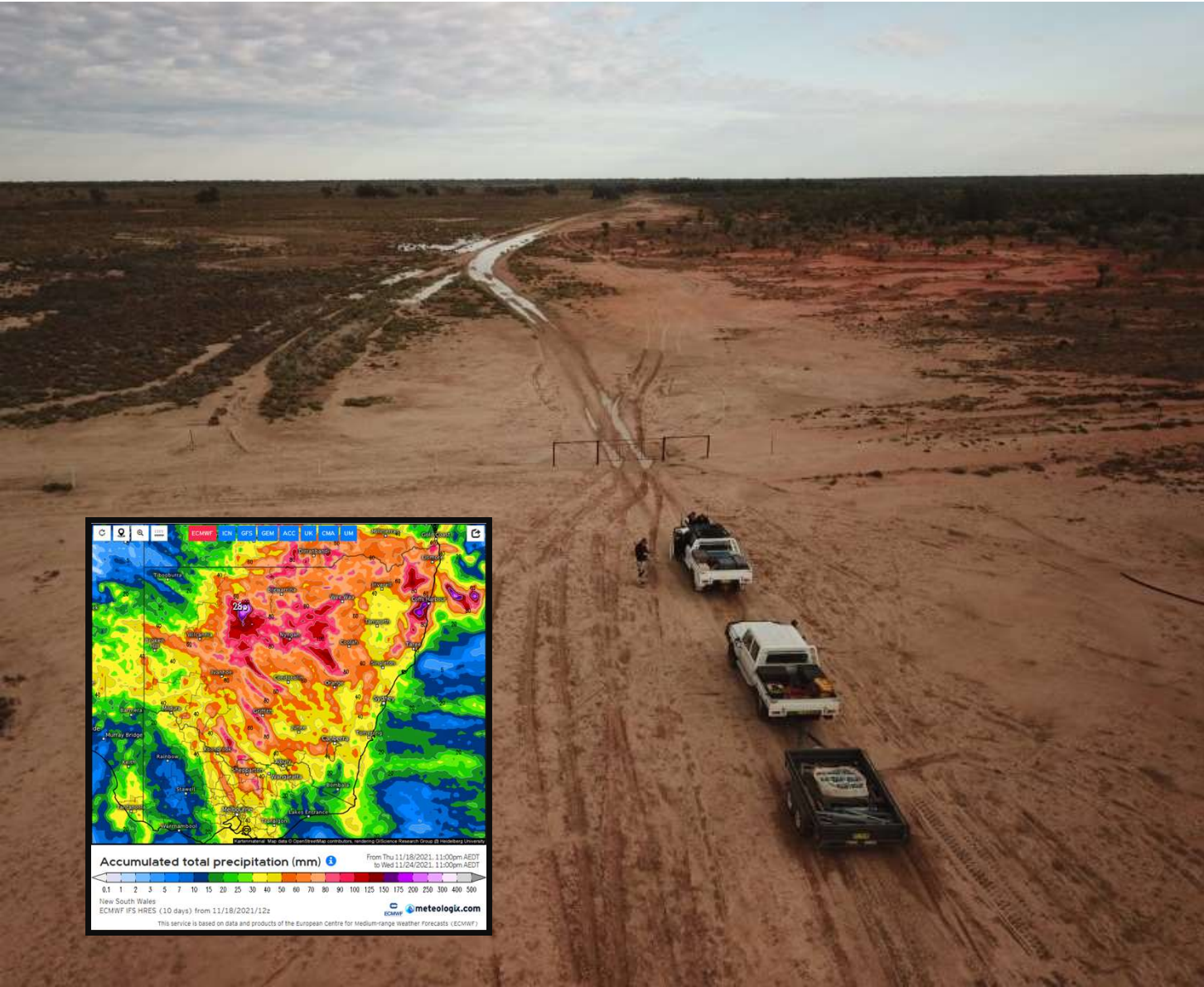
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The Process



- Limitations on where collars could be fitted
- Limited success in trapping wild dogs (despite sign)
- The absolute worst timing with weather





The Successes

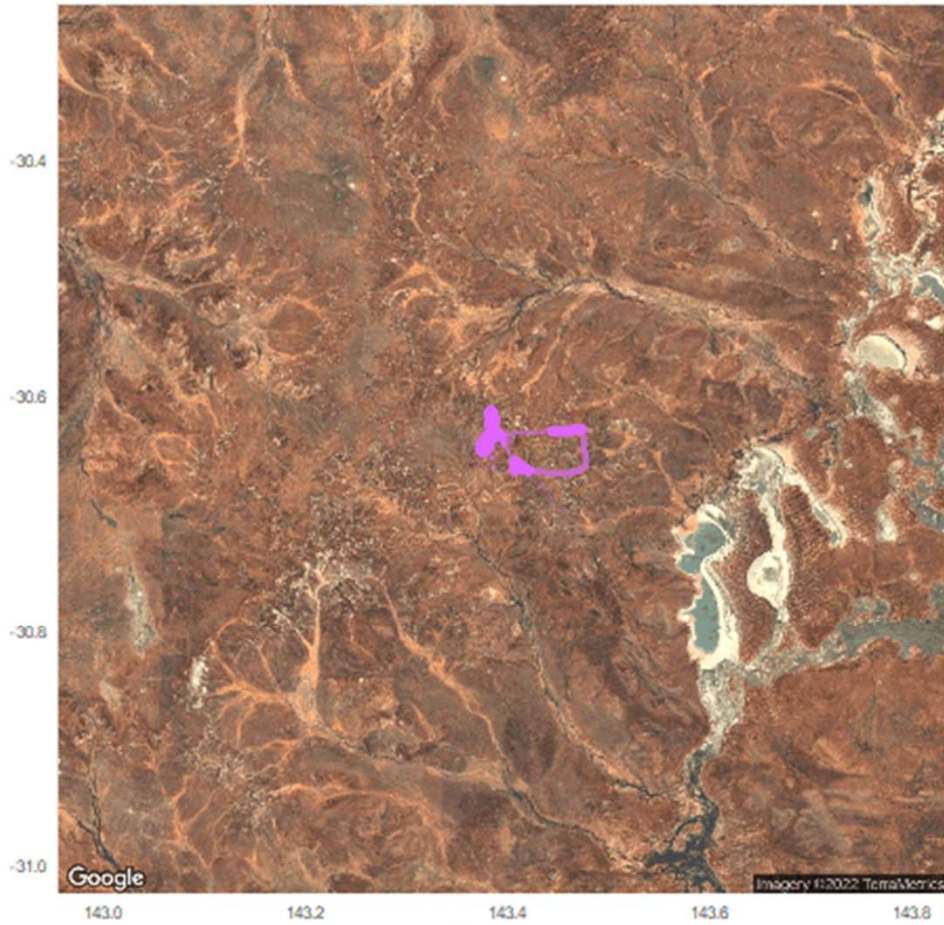


- Capture of 11 individuals
- 4 animals with 200+ days of data
- 2 animals with known baiting events and known bait placements
- 1 animal with a extremely long-distance movement
- Some other very interesting results

Name	Days	Fixes
Betty	15	1395
Bruce	50	2360
Delta	41	2715
Fred	3	186
Konnie	8	345
Logan	75	4453
Lucky	317	15019
Luna	374	17587
Mallory	238	12795
Myrtle	407	20199
Vivi	35	2561

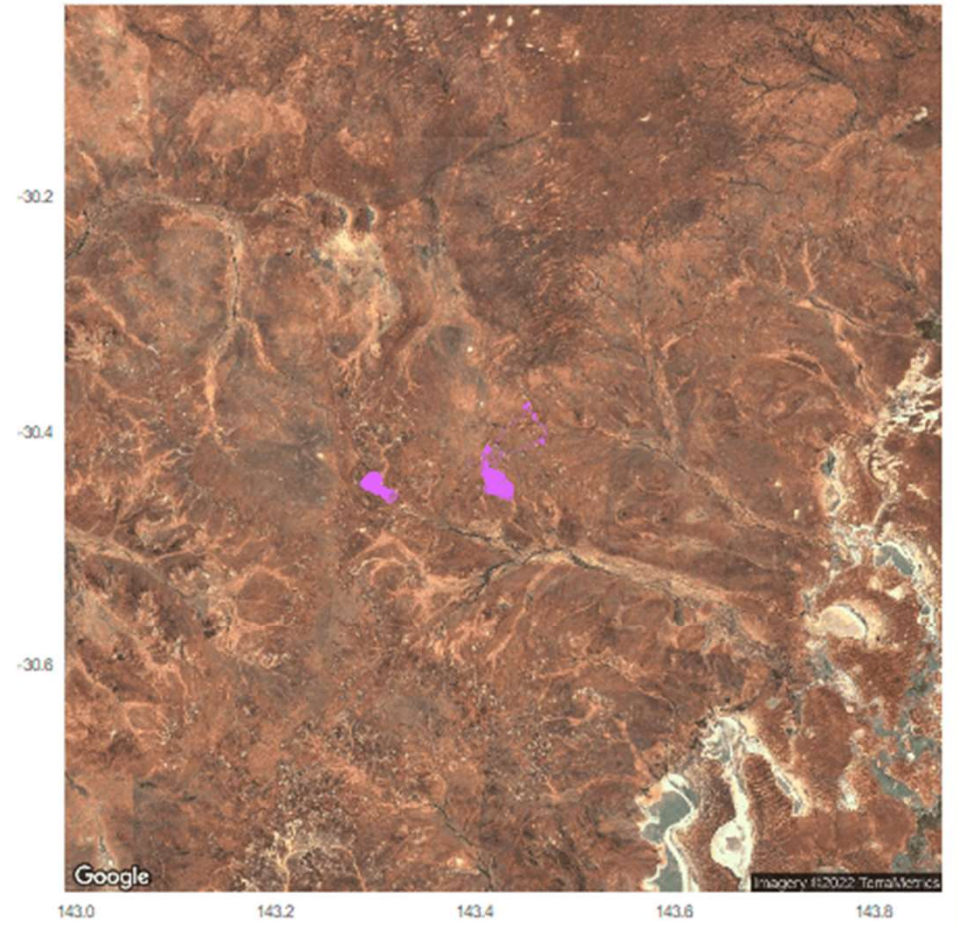
Mallory

Date: 28-03



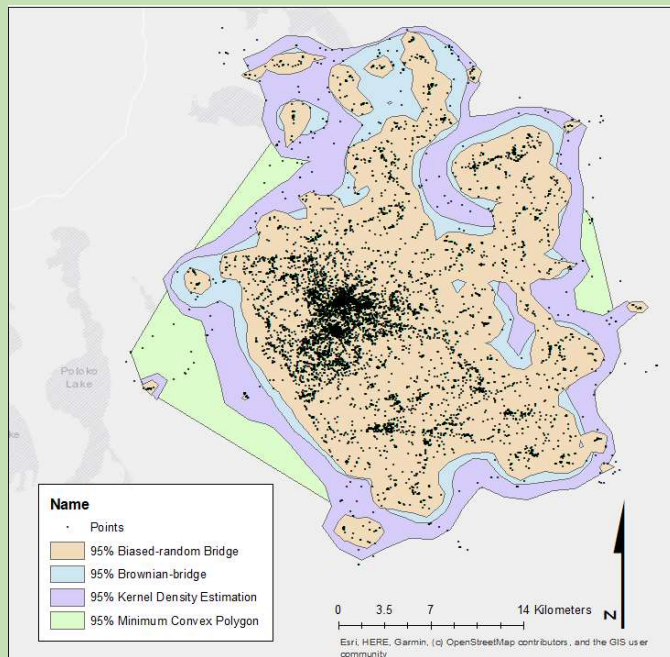
Myrtle

Date: 29-03

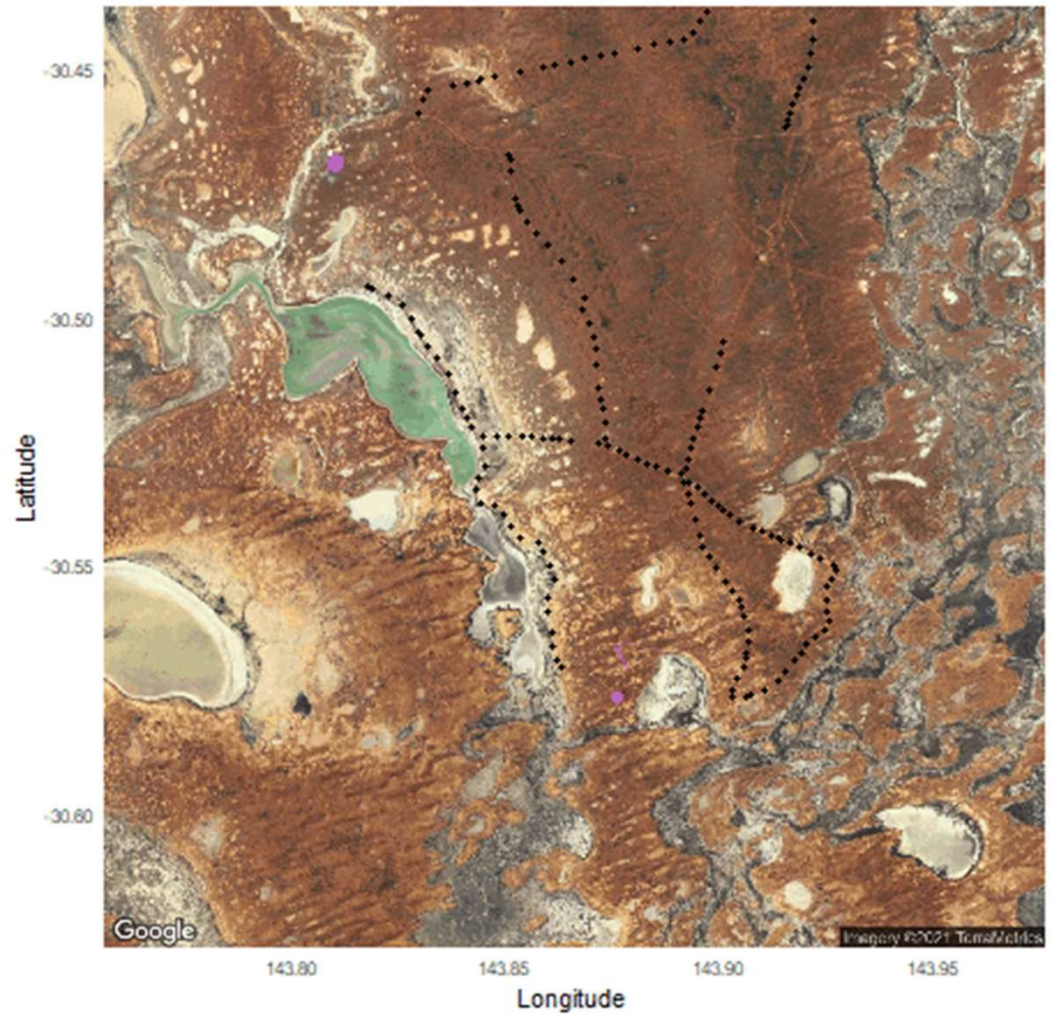


The Results

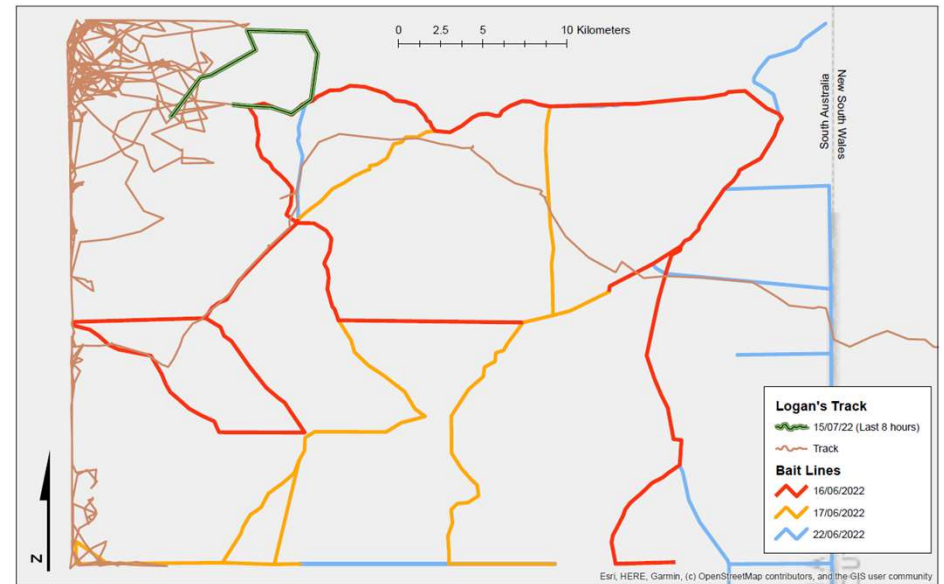
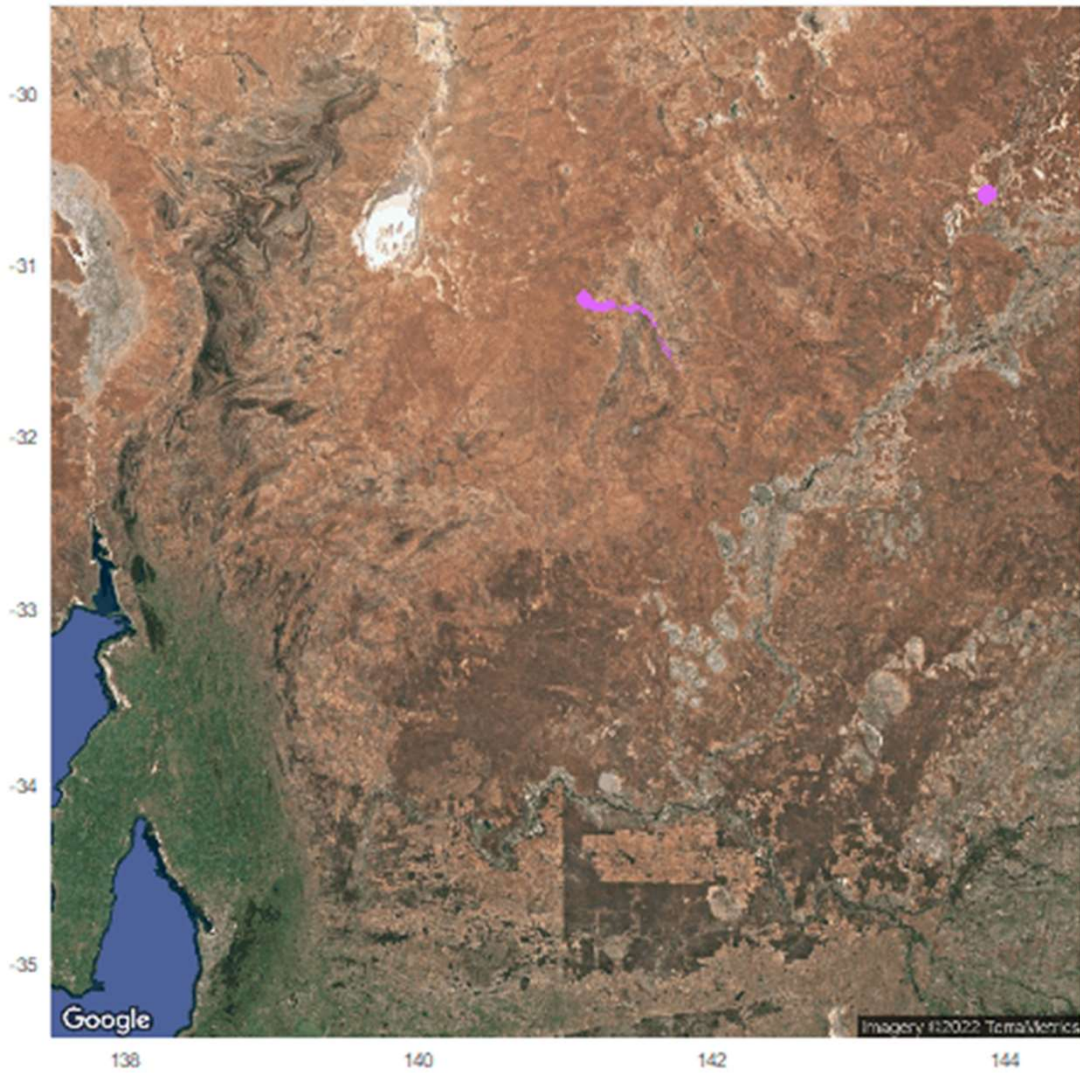
Name	Days	Fixes	Gender	MCP95	UD95	Brownian	Displace	AvDailyTrav
Betty	15	1395	F	207.3	196.9	49.1	9.8	NA
Bruce	50	2360	M	1193.1	1328.9	355.1	5.2	17.9
Delta	41	2715	F	615.9	714.6	188.6	6.1	25.1
Fred	3	186	M	51.2	147.7	17.6	4.1	18.5
Konnie	8	345	F	90.3	233.9	36.1	2.7	19.8
Logan	75	4453	M	735.8	798.4	156.2	6.9	31.1
Lucky	317	15019	M	313.1	270.4	112.3	4.4	15.2
Luna	374	17587	F	698.8	555.7	254.7	6.3	23.7
Mallory	238	12795	F	676.3	422.6	132.1	6.4	22.8
Myrtle	407	20199	F	1655.8	1303.8	444.6	6.4	20.4
Vivi	35	2561	F	298.1	349.7	115.6	6.7	31.8

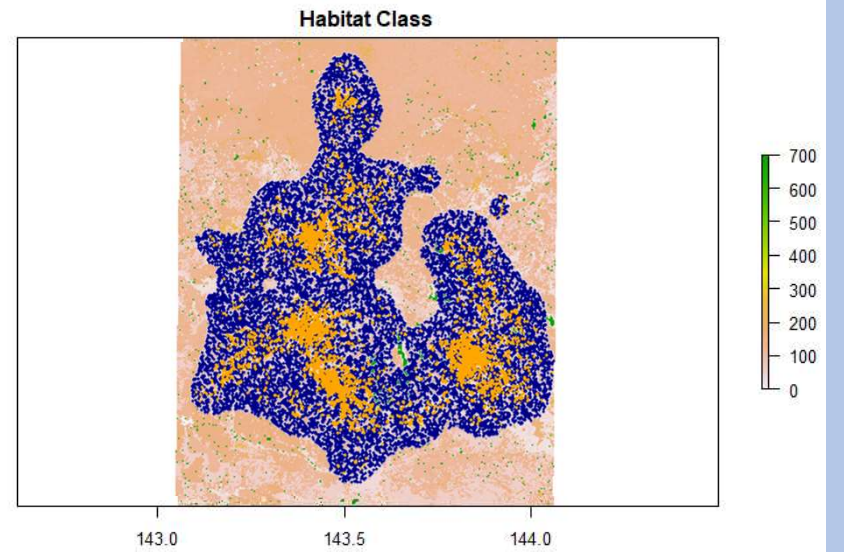
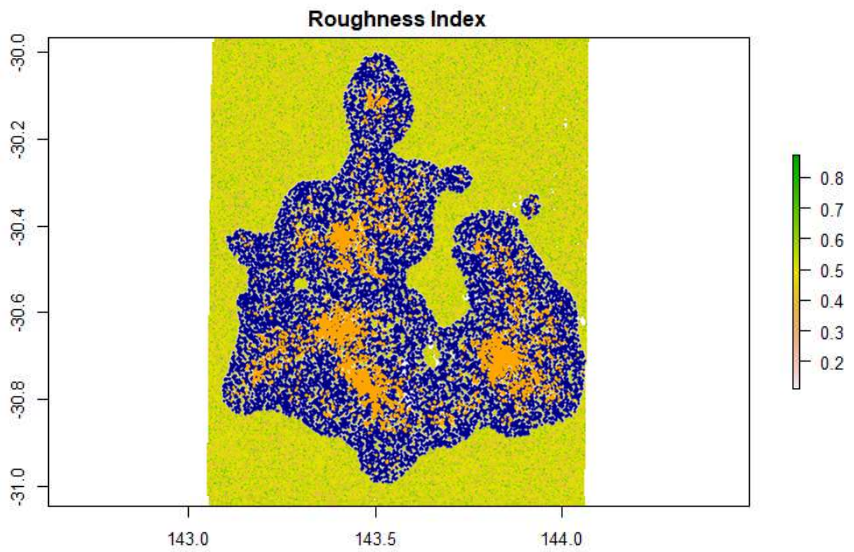
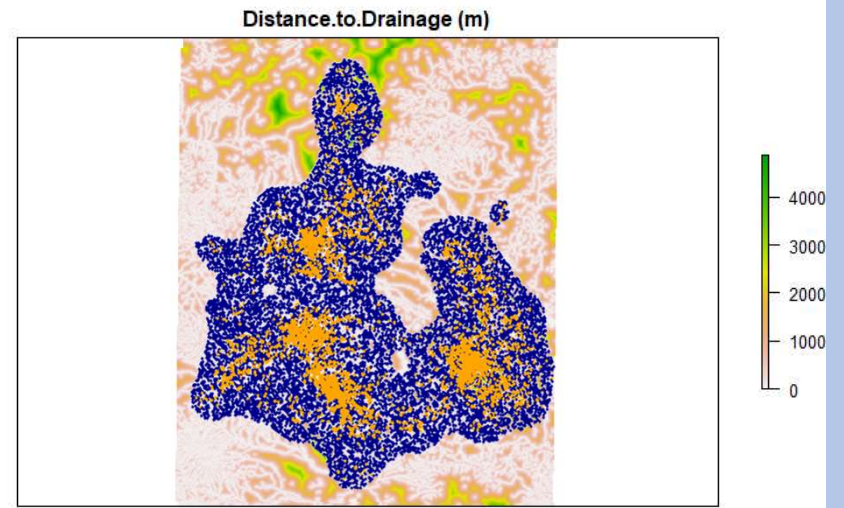
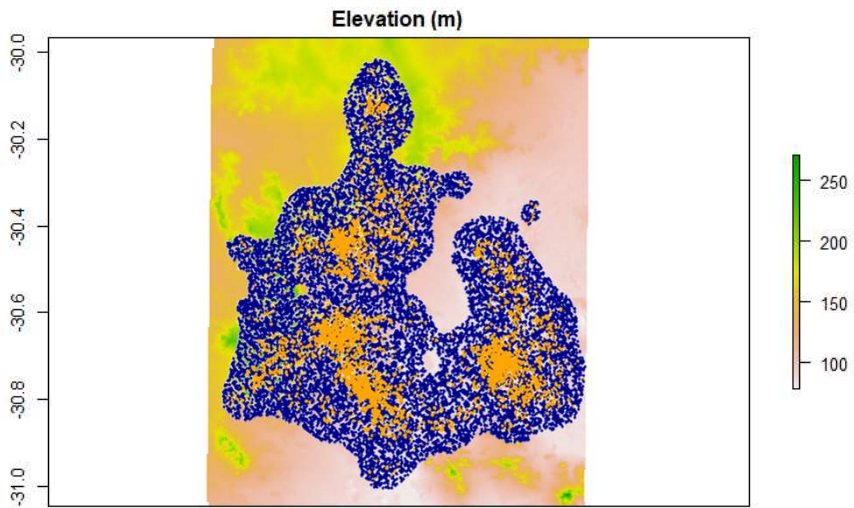


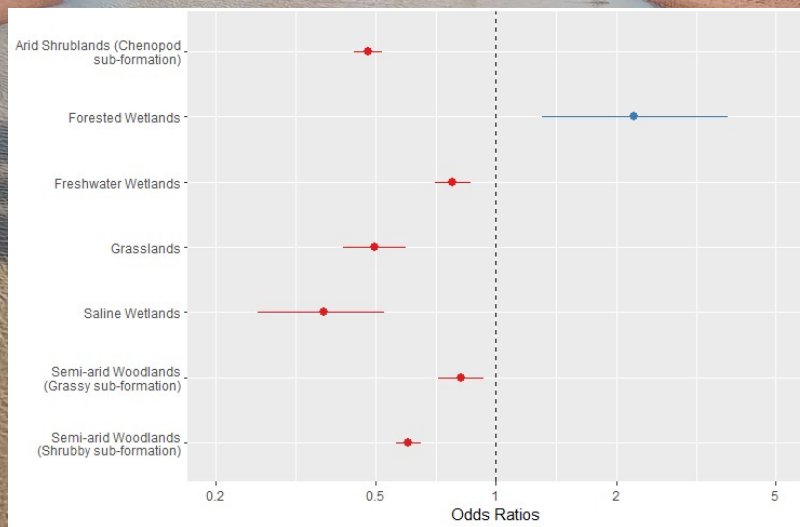
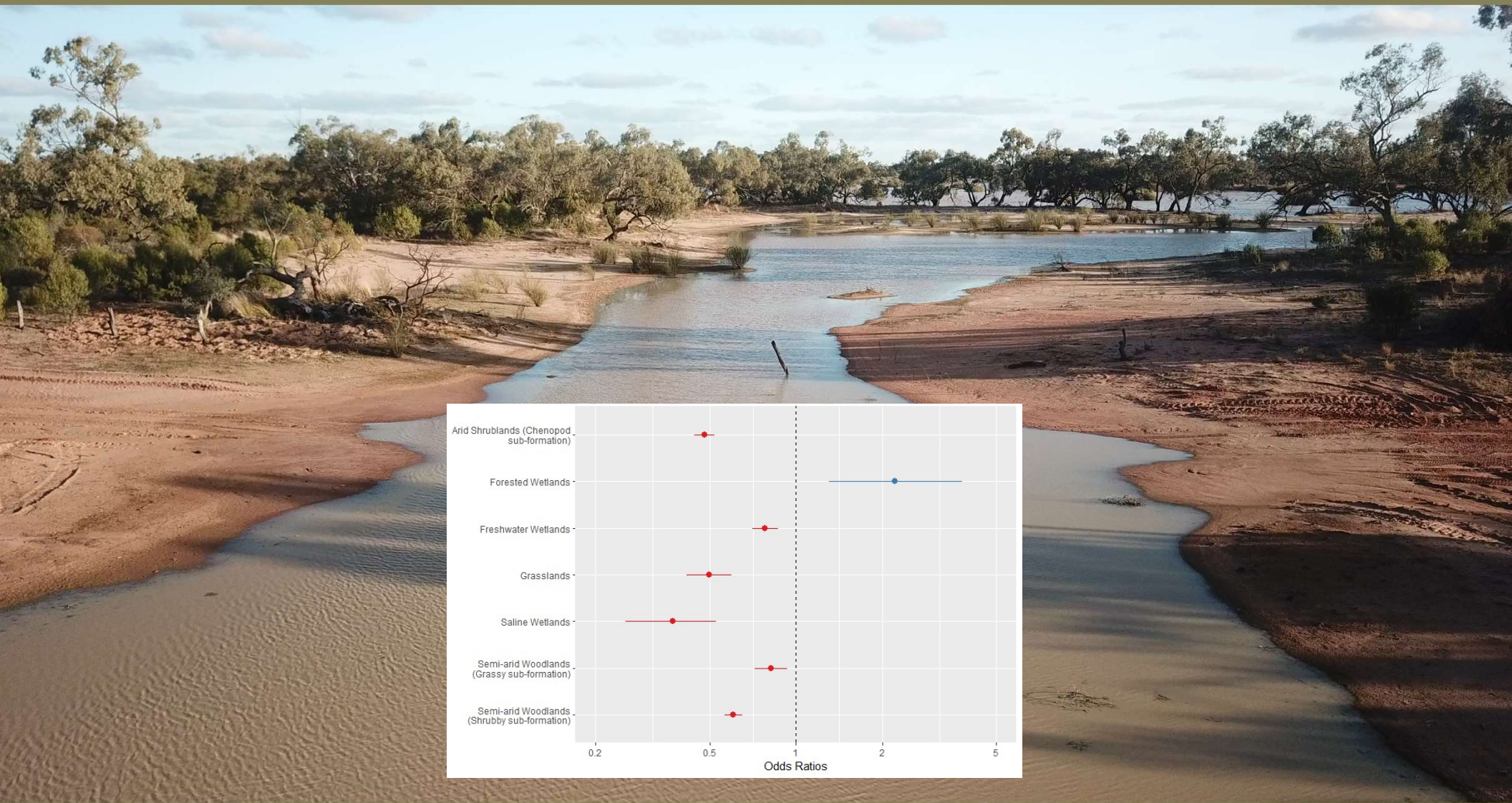
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Logan







The Implications

- Shows how far wild dogs in WNSW can move in a day and how much space they can use – the need for coordinated baiting and constant monitoring
- Shows the usefulness of high-resolution baiting data in understanding how dogs interact with baiting
- Shows the potential use of space and habitat preferencing to better target wild dog baiting programs at a landscape level in the western region
- Use of these outputs will be used help engage the WNSW community in wild dog control

The Future

- Currently have funding to continue this work and camera trapping until the end of the year
- Currently seeking funding to continue into the future



Thankyou



Deane Smith
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NSW DPI VPRU



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