

Koala-cattle interaction study

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Background

- Populations are declining to “Vulnerable” due to habitat loss
- Expansion of cattle grazing accounts for major land clearing in rural areas of Qld



Background

- Large overlap of grazing land and koala habitat
- Development of “koala beef” concept



Background

- Anecdotal evidence shows cattle kill koalas
- No research to investigate this



Objectives

- Explore the extent of cattle-inflicted koala mortality
- Investigate impacts of cattle on koala behaviour
- Examine potential injuries or deaths of koalas caused by cattle.

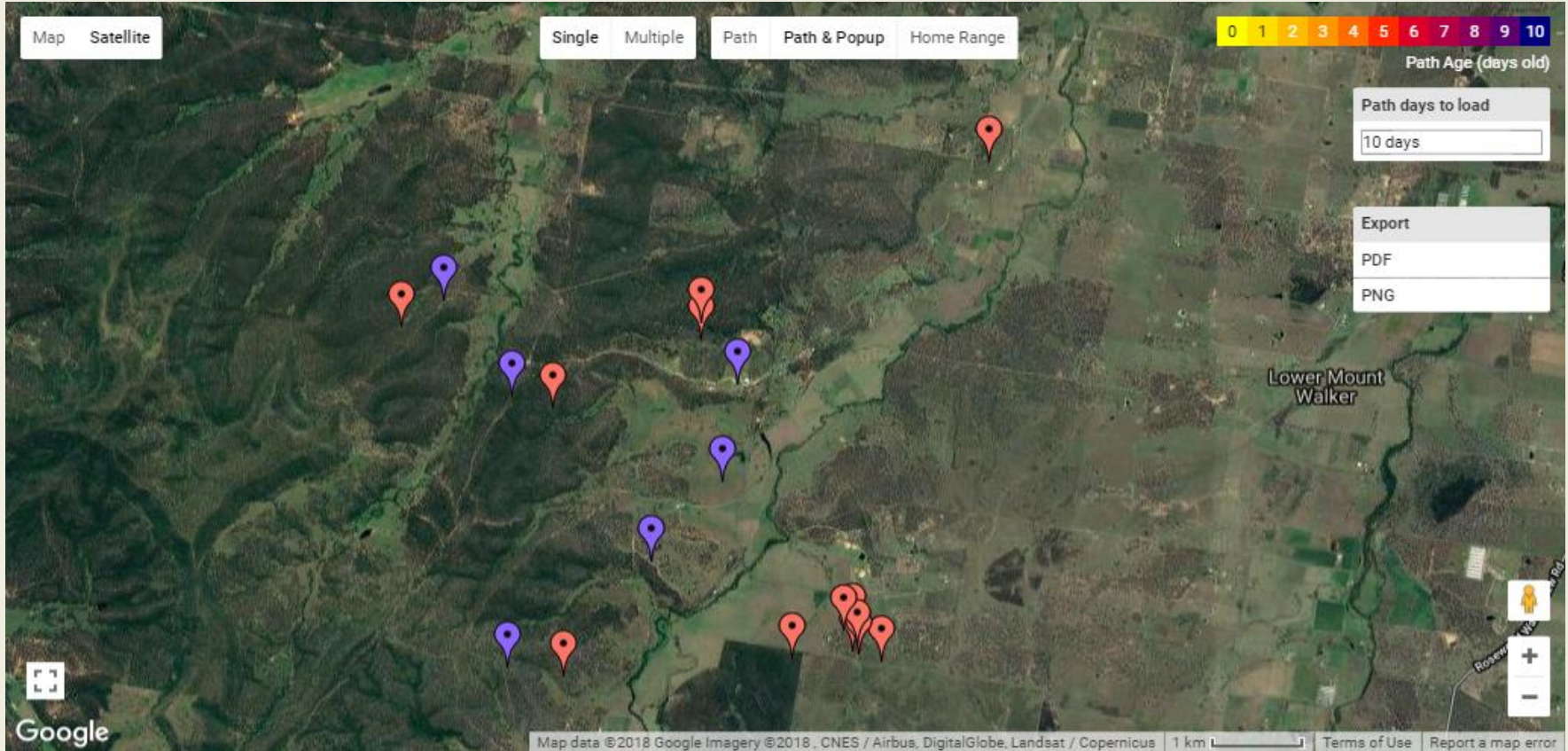


Methodology

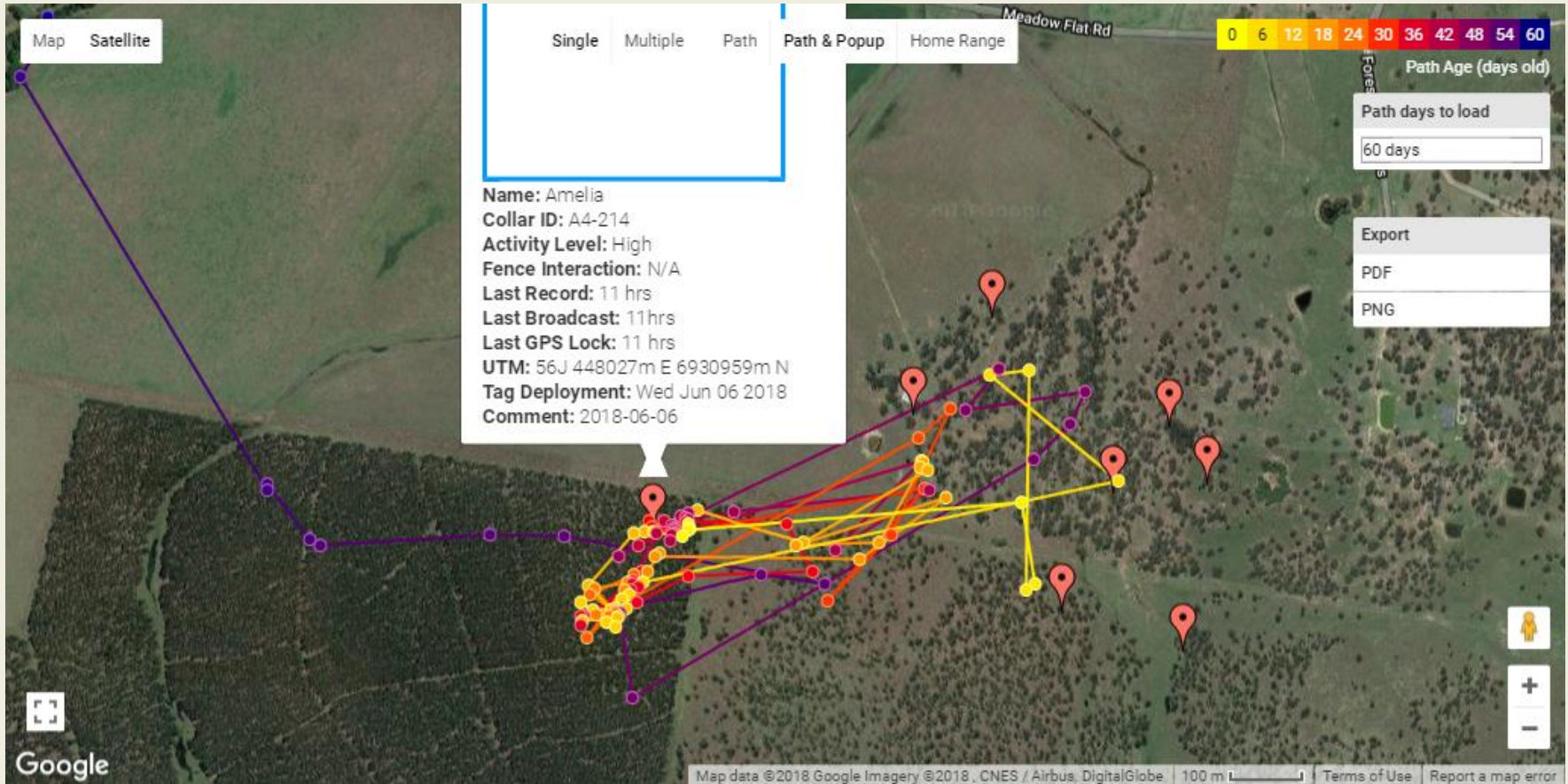
Koala monitoring technique – LX telemetry system

- Leading technology in koala monitoring
- LX collar + base station
- Provides data of location fixes and activity levels
- Near real-time monitoring





The distribution of tagged koalas on HV in September 2018. Red balloon symbols indicate koalas; purple balloon symbols indicate LX data stations



Koala “Amelia” with her ID, activity level and path over the previous 60 days displayed on LX website

Methodology

Part 1: Survey of cattle-inflicted koala injuries and deaths

- Major wildlife hospitals, clinics, wildlife carers and rescue groups in rural areas where koala habitat and cattle grazing overlap
- Determine extent of previous koala-cattle interactions



Methodology

Part 2: Impacts of cattle on koala behaviour

- Cattle grazing in koala home range
- Monitor cattle location by LX collar to determine when they share same areas with koalas
- Compare koala behaviour when sharing home ranges with cattle and when not
- Necropsy of possible koala deaths



Hypotheses

- Koala home ranges change to avoid potential contact with cattle
- Cattle are a significant cause of injury or death of koalas



Permits

- UQ Animal Ethics Approval – processing
- Scientific Purposes Permit – WA0008304
- DAF Approval
- Permit to use HV cattle and facilities



Acknowledgement

- The Royal Society of Queensland
- UQ
- Hidden Vale (the Turners Family Foundation)
- Endeavor Veterinary Ecology



Questions?

