Feral cat densities on Kangaroo Island

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Variation in feral cat densities across Australia

Between 2-6 million feral cats in Australia

Legge, S., et al. 2017 Enumerating a continental-scale threat: How many feral cats are in Australia?, Biological Conservation, 206
Variation between the mainland and islands

Average feral cat density estimate

Legge, S., et al. 2017 Enumerating a continental-scale threat: How many feral cats are in Australia?, Biological Conservation, 206
Feral cat density on Kangaroo Island

1. How do feral cat densities on Kangaroo Island compare to mainland estimates?

2. How does feral cat density vary across Kangaroo Island?
   - Forest
   - Farmland
   - Forest/farmland borders
Estimating density

Motion triggered camera arrays

- Forest: three arrays
- Forest/farmland border: three arrays
- Farmland: three arrays
Estimating density

- Cameras ~ 800m apart
- For 1.5-2 months
- Spatially explicit capture mark recapture
Feral cat density results

Cat densities variable across KI between:
- Farmland
- Forest
- Park boundaries

No convergence

0.23
0.21
0.42
0.45
0.50
0.12
2.91
0.53
Does this fit with other Australian islands?

Average density: 0.67 cats/km²
Average density without outlier: 0.35 cats/km²
Island area: 4,405 km²

Legge, S., et al. 2017 Enumerating a continental-scale threat: How many feral cats are in Australia?, Biological Conservation, 206
Outcomes

Cat densities variable across KI with:
  • Farmland
  • Forest
  • Forest/farmland boundaries

Likely a result of factors other than broad vegetation type:
  • Prey density
  • Availability of roadkill/carcasses
  • Shooting

Cat densities on average higher than mainland estimates:
  • Likely threaten wildlife particularly in high density areas
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