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Supplementary Material

Tracking the spread of the eastern dwarf tree frog (*Litoria fallax*) in Australia using citizen science

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SUPPLEMENTARY DATA

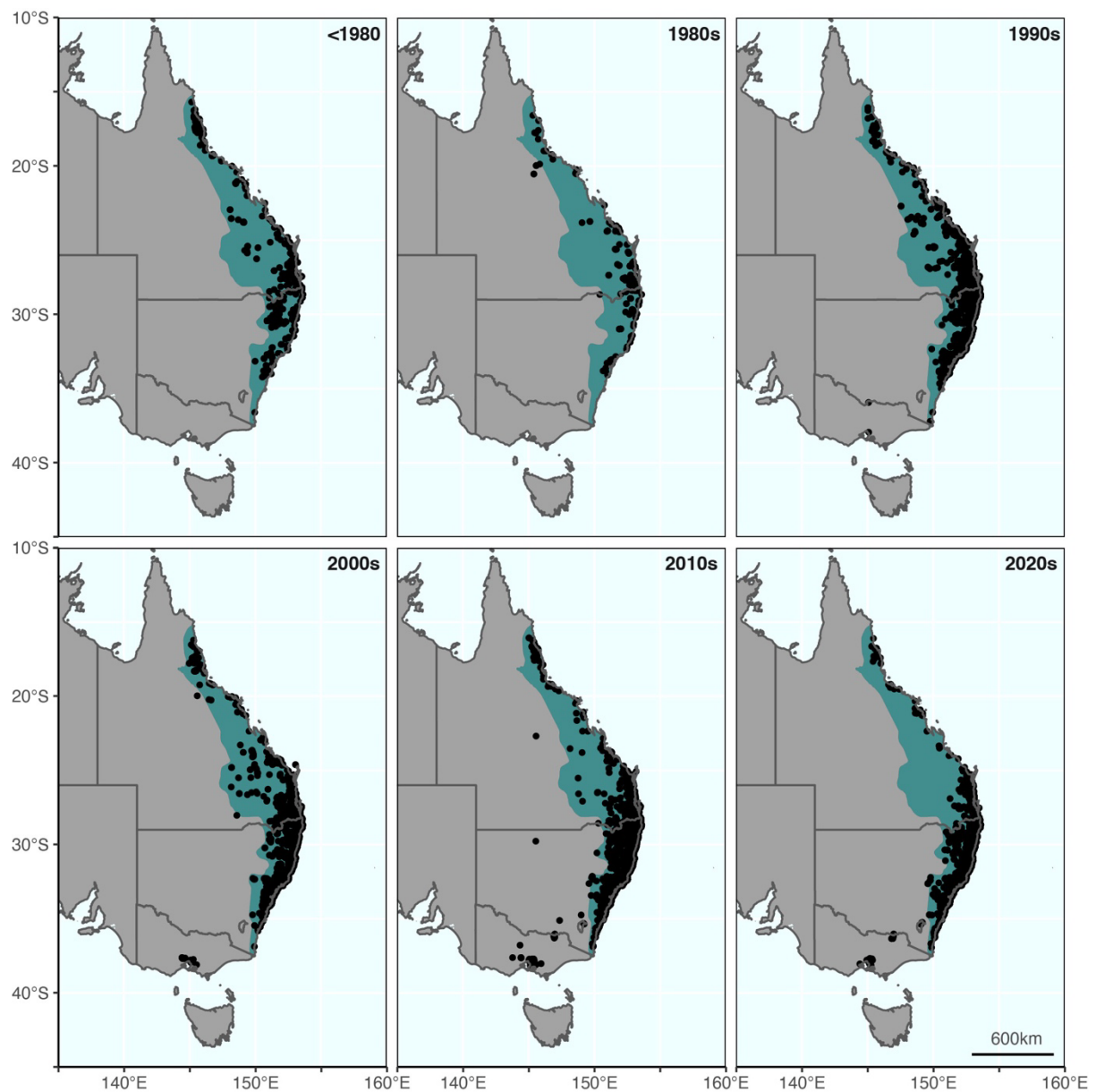


Figure S1. Records of *Litoria fallax* (black circles) in Australia from the national biodiversity aggregate Atlas of Living Australia (ALA 2022) over time (minus records via the FrogID project). The approximate native range of *Litoria fallax* is indicated in green. No records of *Litoria fallax* were documented outside the native range of the species until the 1990s.

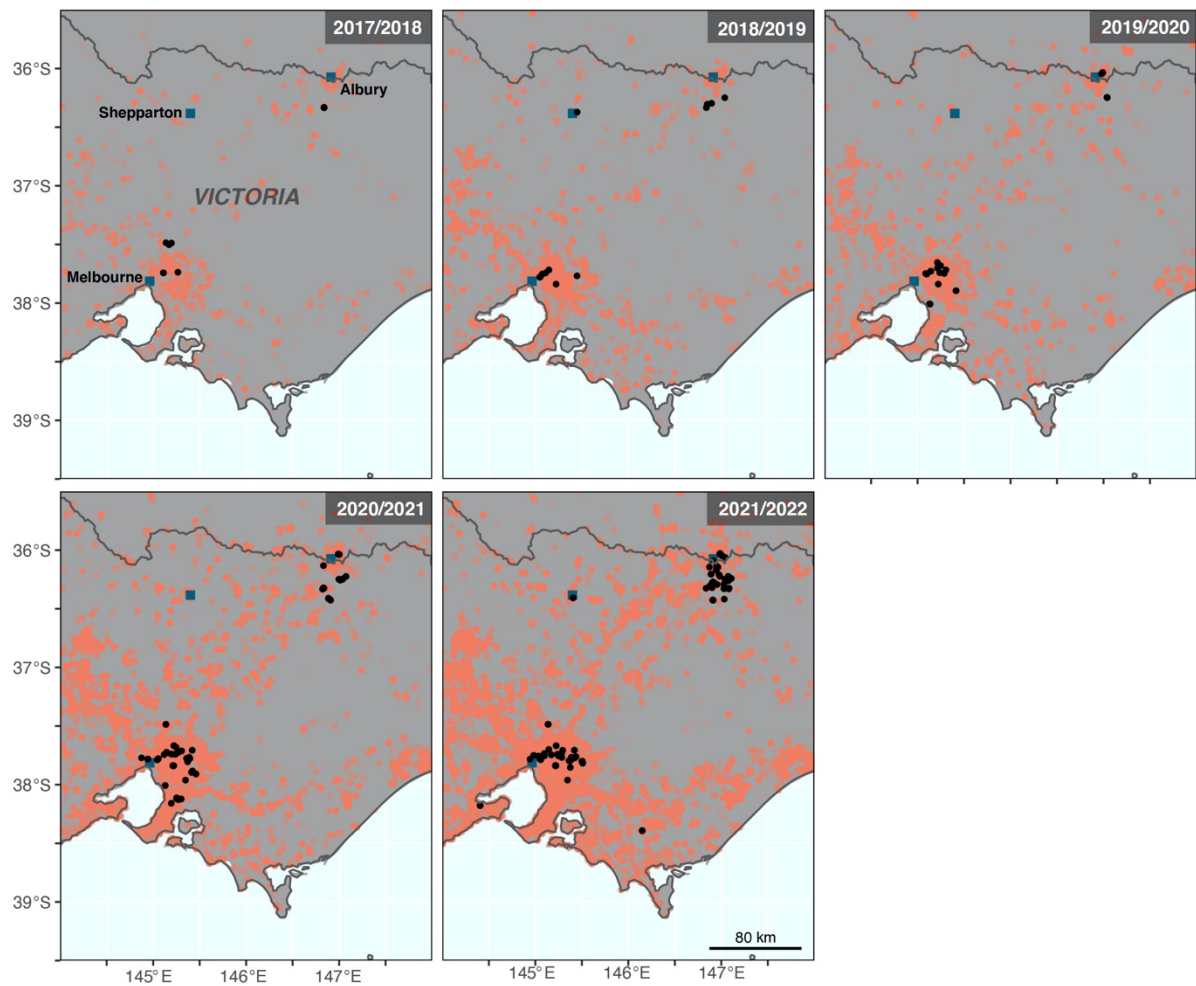


Figure S2. Records of *Litoria fallax* (black circles) and other frog species (pink circles) from the FrogID project over time. Each panel spans 1 July to 30 June and represents an entire breeding season for the species (except for 2017/2018, which spanned 11 November to 30 June).

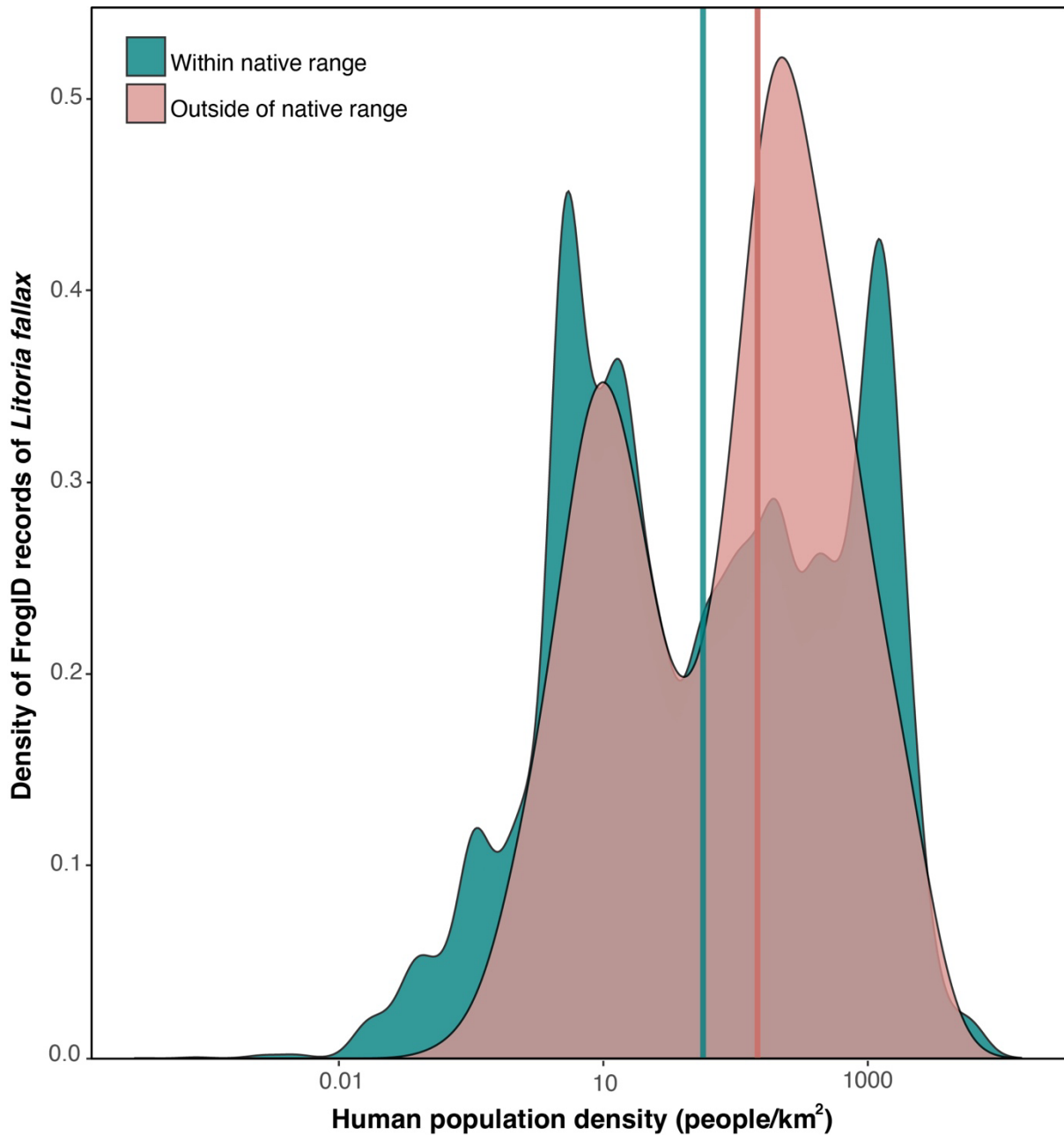


Figure S3. Density plot of records of *Litoria fallax* (from the FrogID project from 10 November 2017 to 30 June 2022) from within and outside of the presumed native range of the species against population density (number of persons per square kilometer; Gridded Population of the World v4). Median human population densities are represented by solid vertical lines.

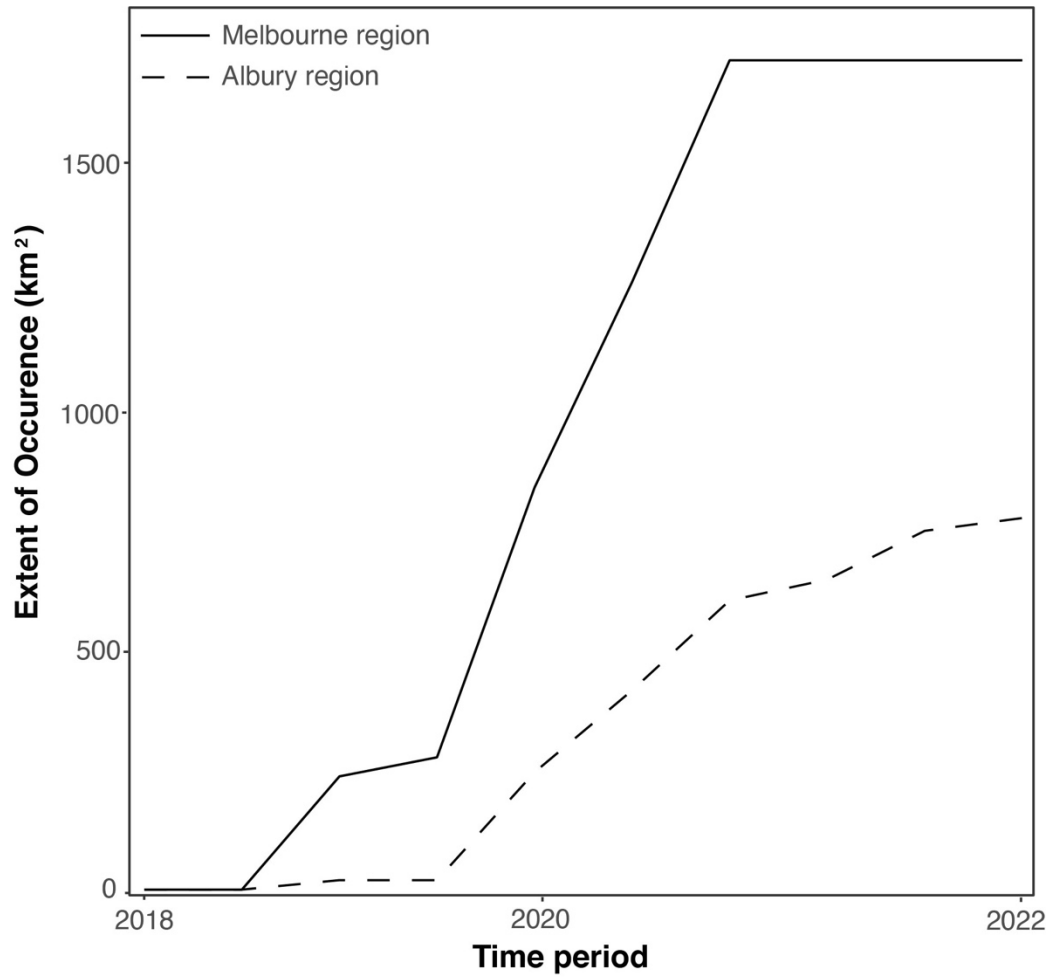


Figure S4. Cumulative extent of Occurrence (EOO) calculated at six-monthly intervals for *Litoria fallax* populations as detected via FrogID in the Melbourne and Albury areas (see Figure 3).

Table S1. Species of frog documented calling at the same site as *Litoria fallax* within its native range and outside its native range via the FrogID project.

Species	In range	Out of range
<i>Adelotus brevis</i>	x	
<i>Assa darlingtoni</i>	x	
<i>Austrochaperina pluvialis</i>	x	
<i>Cophixalus australis</i>	x	
<i>Cophixalus ornatus</i>	x	
<i>Crinia deserticola</i>	x	
<i>Crinia parinsignifera</i>	x	x
<i>Crinia remota</i>	x	
<i>Crinia signifera</i>	x	x
<i>Crinia sloanei</i>		x
<i>Crinia tinnula</i>	x	
<i>Cyclorana alboguttata</i>	x	x
<i>Cyclorana brevipes</i>	x	
<i>Cyclorana cultripes</i>	x	
<i>Cyclorana novaehollandiae</i>	x	
<i>Geocrinia victoriana</i>		x
<i>Lechriodus fletcheri</i>	x	
<i>Limnodynastes convexiusculus</i>	x	
<i>Limnodynastes dumerilii</i>	x	x
<i>Limnodynastes fletcheri</i>	x	x
<i>Limnodynastes peronii</i>	x	x
<i>Limnodynastes salmini</i>	x	
<i>Limnodynastes tasmaniensis</i>	x	x
<i>Limnodynastes terraereginae</i>	x	
<i>Litoria aurea</i>	x	
<i>Litoria balatus</i>	x	
<i>Litoria barringtonensis</i>	x	
<i>Litoria bicolor</i>	x	
<i>Litoria brevipalmata</i>	x	
<i>Litoria caerulea</i>	x	
<i>Litoria chloris</i>	x	
<i>Litoria citropa</i>	x	
<i>Litoria dentata</i>	x	
<i>Litoria ewingii</i>	x	x
<i>Litoria freycineti</i>	x	
<i>Litoria gracilentata</i>	x	
<i>Litoria inermis</i>	x	
<i>Litoria infrafronata</i>	x	
<i>Litoria jervisiensis</i>	x	

<i>Litoria jungguy</i>	x	
<i>Litoria latopalmata</i>	x	x
<i>Litoria lesueuri</i>	x	
<i>Litoria microbelos</i>	x	
<i>Litoria nasuta</i>	x	
<i>Litoria nigrofrenata</i>	x	
<i>Litoria nudidigitus</i>	x	
<i>Litoria olongburensis</i>	x	
<i>Litoria pearsoniana</i>	x	
<i>Litoria peronii</i>	x	x
<i>Litoria phyllochroa</i>	x	
<i>Litoria quiriratus</i>	x	
<i>Litoria revelata</i>	x	
<i>Litoria rothii</i>	x	
<i>Litoria rubella</i>	x	
<i>Litoria serrata</i>	x	
<i>Litoria subglandulosa</i>	x	
<i>Litoria tyleri</i>	x	
<i>Litoria verreauxii</i>	x	x
<i>Litoria wilcoxii</i>	x	
<i>Litoria xanthomera</i>	x	
<i>Mixophyes balbus</i>	x	
<i>Mixophyes carbinensis</i>	x	
<i>Mixophyes coggeri</i>	x	
<i>Mixophyes fasciolatus</i>	x	
<i>Mixophyes iteratus</i>	x	
<i>Neobatrachus sudellae</i>	x	
<i>Notaden melanoscaphus</i>	x	
<i>Papurana daemeli</i>	x	
<i>Paracrinia haswelli</i>	x	
<i>Platyplectrum ornatum</i>	x	
<i>Pseudophryne australis</i>	x	
<i>Pseudophryne bibronii</i>	x	x
<i>Pseudophryne coriacea</i>	x	
<i>Pseudophryne dendyi</i>	x	
<i>Pseudophryne major</i>	x	
<i>Pseudophryne raveni</i>	x	
<i>Rhinella marina</i>	x	
<i>Uperoleia altissima</i>	x	
<i>Uperoleia fusca</i>	x	
<i>Uperoleia laevigata</i>	x	x
<i>Uperoleia lithomoda</i>	x	

<i>Uperoleia littlejohni</i>	x	
<i>Uperoleia mahonyi</i>	x	
<i>Uperoleia mimula</i>	x	
<i>Uperoleia rugosa</i>	x	
<i>Uperoleia tyleri</i>	x	

References

ALA (2022) Atlas of Living Australia occurrence download at <https://doi.org/10.26197/ala.2c1a108a-5c34-4f46-bab6-03b0c519f6a5> [Accessed 28 July 2022].