

# Amphibians in Drains- Ballumbie 2021 Report

## TAYSIDE BIODIVERSITY PARTNERSHIP & TAYARG

### Introduction

Ballumbie is a residential area to the north-east of Dundee; it was one of the first sites to implement the use of amphibian ladders, particularly along Poplar Drive, which crosses amphibian migration routes as well as inhibiting an amphibian's ability to get off the roads as posed in the original report in 2014. Over the summer of 2021 Ballumbie was revisited to see if there were any issues with the pre-existing ladders that were installed and any potential sites that may benefit having new ladders installed.

The main goal was to investigate areas of interest where there are many instances of amphibians being found in the gully pots around Ballumbie. This included the number of alive and dead amphibians, their life stage and sex found in each gully pot with additional details such as local features which might be indicative of hot spots. This included the roads where amphibian ladders have been installed, and the results gain, as seen in the tables below, and there are conclusions that can be drawn.



- The areas where ladders had been installed regularly had no amphibians, dead or alive, especially on Poplar Drive. However, some need some dedicated maintenance to declutter and adjust them.
- Silver Birch Drive and Copper Beech Row had little to no activity and seem to have less amphibian activity.
- Chestnut Green and Hawthorn Grove had limited activity and the occasional amphibian in the gully pots, especially in comparison to more active areas.
- Elm Rise, Oak Loan, and Lime Grove were particularly heavy with amphibian activity and instances in gully pots, both dead and alive. The surrounding areas had a lot of undergrowth which is good habitat for the frogs and toads.
- In Elm Rise it is the gully pots around Elm House that had the highest instances of trapped toads (closest to the bank and the castle).
- Oak Loan had two adjacent areas of grass where all amphibians were found where there are two gully pots on either side of the road which is where the amphibians were found.
- Lime Grove has a cul-de-sac and the crossing for the golf course, gully pots had high instances of trapped amphibians as well as the highest number of dead amphibians in one gully pot (in excess of 12 dead toads of all life stages and sex, while also surrounding live toads after particularly heavy rainfall).

(i) Common Toad

Date	Poplar Drive	Silver Birch Drive	Chestnut Green	Hawthorn Grove	Copper Beech Row	Elm Rise	Lime Grove	Oak Loan
			1 male	3 male		2 male	n/a	n/a
			1 female	1 female		8 female		
						2 juvenile		
						1 dead		
						1 possible uncapture		
21/07/2021	0	1 juvenile	n/a	n/a	0	2 juveniles - unable to be rescued	1 female	6 juvenile
						3 male	1 male	
						1 juvenile	1 juvenile	
						1 female		
						2 suspected uncaptu		
02/08/2021	0	0	1 male unable to rescue*	0	0	1 male	1 dead male	3 males
						1 female dead	1 female	2 juveniles
						2 juveniles	2 male	
							7 juveniles	
			1 male	3 male			7 dead Juveniles**	
			1 female	1 female		2 male	12+ dead toads of varying age and sex***	
						8 female	n/a	

2/8/21 –

\*grate was rusted shut and net would not fit through the grate

\*\*2 of these were with a ladder - opposite the 2nd lamppost in

\*\*\* no ladder and there were so many that were piled on top of each other I couldn't keep track after 12. They were of varying ages of both males and females. I was able to rescue 5 juveniles that were still alive. There were possibly more but impossible to tell.

Notes:

*Wet weather caused a lot of toads and frogs to be on the road which would have increased the toads found dead during the time I was not on site. May need a rescue team after rainfall to collect them in the future.*

*Lime Grove - some ladders need repositioning and cleaning*

*Elm Rise - issues in similar areas outside and near to Ballumbie House, at end of road attached to Silver Birch Drive in need of cleaning and resetting.*

*Elm Rise - looks like it is becoming a problem area for toads.*

**(ii) Common Frog**

Date	Poplar Drive	Silver Birch Drive Drive	Chestnut Green	Haw-thorn Grove	Copper Beech Row	Elm Rise	Lime Grove	Oak Loan
	0	0	0	1 dead 1 rescued	0	0	n/a	n/a
21/07/21	0	0	n/a	n/a	0	0	1 unknown	0
02/08/21	0	0	3 dead 0	0	0	0	1 dead possible dead frogs*	0

Notes:

*\*wet weather caused a lot of toads and frogs to be on the road which would have increased the toads found dead during the time I was not on site. A rescue team would be helpful after rainfall to collect them.*

*21/7/21: not many frogs at all, only one seen and helped out - it got stuck on a ladder that had come loose and couldn't get out without falling back in.*

*2/8/21 - only found frogs were dead - in between the last visit and this one.*

**(iii) Gully pot**

Date	Poplar Drive – 14	Silver Birch Drive - 57	Chestnut Green- 26	Haw-thorn Grove - 51	Copper Beech Row – 7	Elm Rise – 43	Lime Grove - 48	Oak Loan - 32
	14 empty	e	26 empty	... empty	.... empty	... empty	n/a	n/a
21/07/2021	14 empty	56 empty			7 empty	37 empty	46 empty	29 empty
02/08/2021	14 empty	57 empty	22 empty	51 empty	7 empty	40 empty	41 empty	30 empty

*Notes: some ladders need cleaning, repositioning and general upkeep; some gully pots were covered by cars; some gully pots were sealed shut from dirt and as such were unable to be removed to rescue juvenile toads.*

## Conclusions and Recommendations

- Minor maintenance and adjustments of some of the ladders along Poplar Drive are needed as they have debris and have been subjected to some level of disturbance.
- Lime Grove needs ladders along the left hand side at the end of the cul-de-sac, as well as the gully pots around the crossing for the golf course on both sides of the road. Both consistently had the most incidences of trapped amphibians and need at least 5 ladders for the worst affected areas around the golf course crossing.
- Elm Rise (x4 for the gully pots on the bank opposite Elm House and next to the ruins of the castle) would also benefit from amphibian ladders as they had the highest instances of trapped amphibians, particularly females and juveniles.
- The four gully pots specified on Oak Loan should also be considered for amphibian ladders.

I would also suggest that during migration periods consistent gully pot checking by volunteers would help combat the effect of weather conditions. It is important not to let it all rest on one person's shoulders so that as many amphibians can be rescued as possible.



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Further reading on Ballumbie: *The Herpetological Bulletin* 132, 2015: 15-19: *Trialling amphibian ladders within roadside gullypots in Angus, Scotland: 2014 impact study* – Clare McInroy & Trevor Rose: [file \(thebhs.org\)](http://file.thebhs.org)

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