

**BAT SURVEY CONDUCTED AT GARROOSE BRIDGE, CO.
LIMERICK, MAY 2026**

**DEROGATION LICENCE APPLICATION – SUPPORTING
INFORMATION**



Garroose Bridge

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I. INTRODUCTION

(a) Objectives

The objective of the proposed works is to maintain Garroose Bridge in a condition where traffic can continue to safely commute across the bridge. Garroose Bridge currently requires some repair works which include masonry repairs and re-pointing as part of Limerick County Council's bridge rehabilitation programme of 2026.

I was contracted by Punch Engineering Ltd to conduct a pre-construction ecology survey of Garroose Bridge, in Co. Limerick.

My remit was to prepare a report to include mitigation measures for any species found. This report presents the results of specialist surveys carried out on 27th May 2026.

(b) Ecologist details

The survey was conducted by Dr Caroline Shiel. Dr Caroline Shiel has over 30 years' experience of bat surveys for academic and commercial purposes. She holds a PhD in zoology awarded by NUI Galway. Her research thesis was "*Diet, foraging and activity at the roosts of Leisler's bat.*" She is a founding member of Bat Conservation Ireland and is currently a director and vice-chair of the organisation. She is also a member of the Heritage Council's panel of bat experts.

She regularly carries out bat surveys throughout Ireland, particularly of masonry bridges and heritage buildings. She holds a derogation survey licence (Sections 22 & 23), bat handling licence, ringing and photography licences, from National Parks and Wildlife Service.

(c)

All surveys and supervisory works will be conducted by Dr Shiel.

2. BACKGROUND TO THE PROPOSED ACTIVITY

Bridge Name: Garroose Bridge

Irish National Grid Reference: 52.397250, -8.661553

Dates of Survey: 27.05.26

Species Recorded: Nursery roost of Daubenton's bats, Wren, Swallow

A derogation licence from National Parks and Wildlife Service will be required to allow works to be conducted on Garroose Bridge due to the presence of the nursery colony of bats.

Proposed works: Masonry repairs and repointing

Description: Garroose Bridge is owned and maintained by Limerick County Council. Garroose Bridge is a three arch masonry bridge, situated 2.94km south of Bruree in Co. Limerick. It spans the River Loobagh which is a tributary of the River Maigue. The River Loobagh joins the River Maigue 750m downstream of Garroose Bridge.

The River Maigue feeds into Lower River Shannon SAC in Adare over 24 km downstream. Garroose Bridge dates from c. 1820. It is listed on NBHS as Reg No. 21904703.

Results:

There is a dry arch on either side of the central river arch. There is a high concrete plinth under both dry arches. The undersurface of the centre arch is sealed with shuttered cement.

A maternity roost of c. 12 Daubenton's bats *Myotis daubentonii* was recorded at the apex of the joint in the stonework under the southernmost arch. Two sections of this joint were marked for retention for the maternity roost of bats. A recently vacated wren's nest was also recorded under the southern arch. Two active swallows' nests were recorded under the northernmost arch.

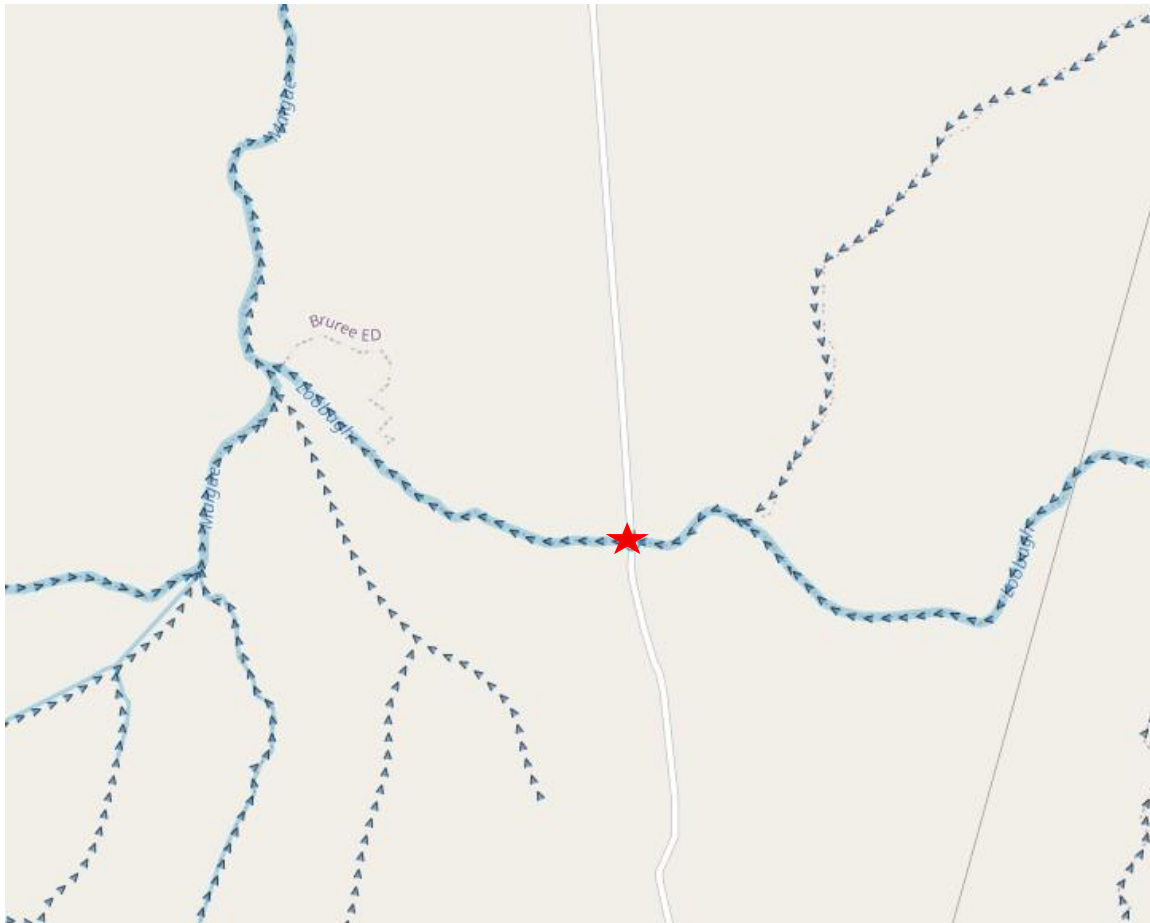


Figure 1 – showing location of Garroose Bridge spanning River Loobagh, feeding into River Maigue

Consultation with NBDC maps reveals that otter has been recorded previously at Garroose Bridge. Freshwater crayfish have also been recorded in the watercourse, both upstream and downstream of Garroose Bridge.

Freshwater pearl mussels do not occur in this watercourse.

There are no protected areas (SACs or SPAs) within 15km downstream. The Zone of Influence is set at 15km for the purpose of Appropriate Assessment screening of a project. The River Maigue enters Lower River Shannon SAC in Adare almost 25km downstream.

3. FULL DETAILS OF PROPOSED ACTIVITIES

It is proposed to conduct essential maintenance and repairs to Garroose Bridge in 2026. A full account of the proposed activities has been supplied by Punch Consulting Engineers (See attached).

4. ECOLOGY SURVEY

Survey Methodology

The bridge structures were inspected thoroughly using a very strong, narrow-beamed rechargeable torch (LEDLENSER –Rechargeable System) to investigate any crevices and joints for roosting bats and assess their suitability as bat roosts. An endoscope was also used to survey deep crevices. A strong step ladder was used to survey high crevices. Chest waders, an automatically-inflating lifejacket and disposable light-weight gloves were worn while surveying.

Evidence of bat presence is usually taken as bats being visible but also records are taken of crevices with bat droppings or staining from urine or oil in the bats' fur. Crevices with evidence of bat usage are clearly marked with red paint.

Records were also taken of any bird species associated with the bridge.

A range of photographs was taken at each bridge to include both upstream and downstream elevations, marked crevices and any birds' nests recorded.

Pre-existing information

A search was conducted of Bat Conservation Ireland database to investigate if bats had been previously recorded roosting in Garroose Bridge. No bat roosts have been recorded at or within 1km of Garroose bridge.

Status of Species

Daubenton's bat is widespread and common and is found throughout Ireland. The species has been assessed as having favourable conservation status in Ireland.

5. REASON FOR DEROGATION

Test 1 – a derogation licence is required to cover the repair works at Garroose Bridge. There is a nursery roost of approx. 12 Daubenton's bats roosting in the expansion joint under the southernmost arch.

The derogation licence is being applied for

1(c) In the interests of public health and public safety, or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment.

Test 2 – Alternative solutions – see application form

Test 3- Impact of derogation on conservation status – There will be no impact on the conservation status of Daubenton's bat.

6. MITIGATION MEASURES

- No works will be conducted until mid -September 2026 when all young bats are fully independent
- Prior to works commencing, a repeat survey will be conducted to investigate if bats are still present in the nursery roost.
- Sections of the expansion joint have been clearly marked for retention with red paint. Retention of these sections of the expansion joint will allow bats to continue roosting in this position in the future
- If bats have to be excluded from the joint, the joint will be blocked with bubble wrap after the bats have emerged at dusk. On completion of the works the bubble wrap will be removed.
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7. MONITORING

The effects of the derogation will be monitored by conducting a repeat survey in 2027 to ensure bats have returned to the site. Report will be sent to NPWS.

Photographs



Photo 1 – winter heliotrope growing at base of parapet wall



Photo 2 – watercourse upstream of bridge. Ideal foraging conditions for Daubenton's bats – sheltered still water with overhanging trees



Photo 3 – watercourse downstream of bridge



Photo 4 – parapet walls with vegetation growing at the base of both walls



Photo 5 – joint in stonework under northernmost arch

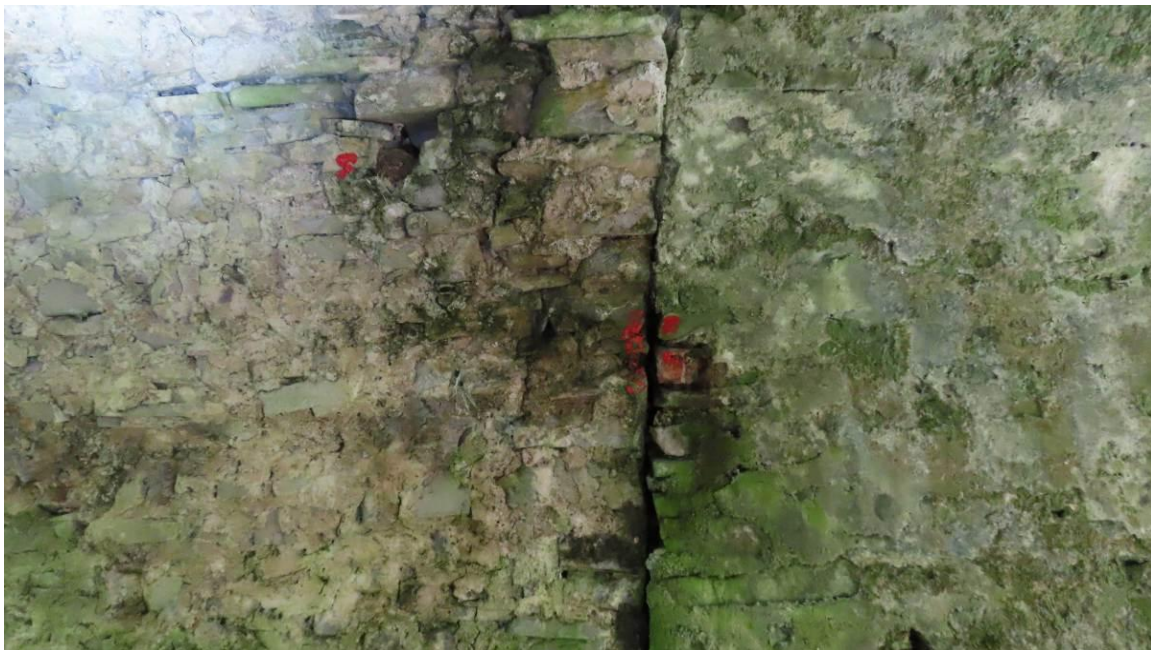


Photo 6 – section of joint under northern arch marked for retention for bats. Position of swallow's nest indicated with a red dot of paint



Photo 7 – looking across upstream face of bridge towards southern dry arch



Photo 8 – undersurface of centre arch sealed with shuttered cement

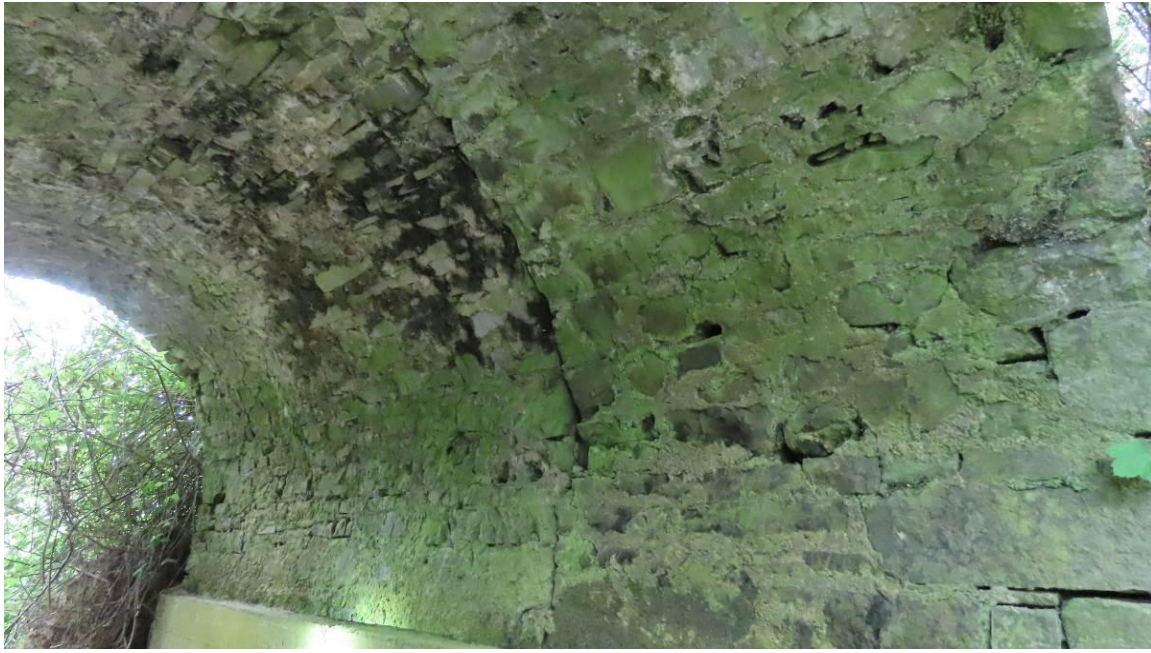


Photo 9 – construction joint under southernmost arch



Photo 10 – large accumulation of bat droppings on cement floor of southernmost arch beneath construction joint



Photo 11 – sections of construction joint under southern arch marked for retention for nursery roost of Daubenton's bats



Photo 12 – upstream face of bridge showing concrete replacement parapet wall over centre arch



Photo 13 – northern and centre arch



Photo 14 – looking south across bridge