

Structure ID	CC-N72-001.00
Bridge Name	Duncannon Bridge
County	Cork
Grid Reference	517998, 593188
Watercourse	River Blackwater
No. of Spans	3
Dates of surveys	06.09.19, 17.06.23, 09.06.24
Species Recorded	Maternity roost of Daubenton's bats. Colony of Sand martins
Bat Grade	3
Recommendations	Repointing works in vicinity of marked crevices to be supervised by ecologist. All bore holes to be left open for sand martins Derogation licence required from NPWS

Duncannon Bridge is a large three arch masonry bridge spanning the River Blackwater in County Cork. The bridge dates from c. 1810. Duncannon Bridge stands within the Blackwater River (Cork/Waterford) SAC. The bridge has been surveyed at least three times between 2019 and 2024. Numerous crevices were marked under the arches for retention for bats. Five crevices were marked under the westernmost arch. One crevice, behind the downstream facing stones of the westernmost arch, contained a nursery colony of approximately 12 Daubenton's bats *Myotis daubentonii*. The bats move between the different crevices and it is imperative that all the marked crevices are retained.

There are bore holes in the abutment walls of the bridge. Many of these bore holes contain Sand martin nests which were active on the date of the surveys in 2023 and 2024 (eggs and nestlings).

There is floating river vegetation upstream of the bridge.

A Derogation Licence from NPWS will be required to allow maintenance work to be carried out at Duncannon Bridge. No works will be permitted until mid- September.

An application has been made for this derogation licence.

There are previous records by NPWS of Freshwater Pearl Mussel at Duncannon Bridge and downstream of the bridge. A survey conducted in 2023 found no Freshwater pearl mussels present within 100m upstream or downstream of the bridge. A single pair of old empty shells were recorded ca. 90m downstream of Duncannon Bridge.

Proposed Works include

Removal of debris trapped at upstream piers, vegetation removal from parapets, wing walls. Masonry repointing of inner faces of parapets, wing walls and abutments, masonry repointing of piers and arch barrels.

Mitigation measures required

Removal of debris trapped at upstream piers and masonry repointing of arch barrels have been screened in as these works will be carried out above and in SAC watercourse. No live aquatic vegetation or silt to be removed from the river bed. Care is to be taken not to disturb

the riverbed when removing debris from the watercourse in order to minimise any disturbance of silt. No machinery to enter watercourse.

Vegetation growing on the structure must be removed by hand. No herbicides permitted.

Work platforms to be covered by geotextile layers to prevent mortar and defective concrete falling into water course.

Timbers to be placed under legs of instream work platforms to prevent them sinking into river bed.

Mixing of material at least 25m from watercourse on impermeable surface.

Contractor to notify Inland Fisheries Ireland and National Parks and Wildlife Service prior to commencement of instream works.

Commuting routes to be left free for otters

Photos from 09.06.24



Duncannon Bridge – upstream elevation



Duncannon Bridge – floating river vegetation upstream



Duncannon Bridge – nursery roost of Daubenton's bats in void under westernmost arch



Duncannon Bridge – view of watercourse downstream



Duncannon Bridge – Sand martin nest in bore hole



Duncannon Bridge – sand martin nest in borehole in abutment



Duncannon Bridge – easternmost arch



Duncannon Bridge – five crevices marked all behind downstream facing stones of westernmost arch

Status of Maternity roost on 17.06.23

Crevices were previously marked under the arches for retention for bats. Of the five crevices marked under the westernmost arch, three contained colonies of Daubenton's bats – 7 bats, 5 bats, 5 bats. Young bats were present indicating that this is a maternity roost.

Sand martins were recorded nesting in almost every drainage hole/bore hole under the arches – mainly under the western and centre arch. One nesting hole was recorded under the eastern arch. Inspection of the nest sites revealed young bird at the full range of developmental stages – eggs, recently hatched nestlings, fledglings almost ready to fly. It is estimated that approximately 20 holes were occupied.

A derogation licence from NPWS will be required to allow maintenance to be conducted at Duncannon Bridge. No works will be permitted until mid September.

Photos from 17.06.23



Upstream elevation of Duncannon Bridge



Five previously marked crevice behind the downstream facing stones of the western arch. A total of 17 Daubenton's bats were recorded in these crevices



Series of 5 bore holes under the western arch – all occupied by nesting sand martins



Easternmost arch – shutter cement applied to arch apex



Sand martin nest in bore hole under eastern arch

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Bridge ID: CC-N72-001.00

Irish National Grid Reference: W17998 93189

Date of Survey: 6/9/19

Species Recorded: Daubenton's bat

Description: Duncannon Bridge is a large 3 arch masonry bridge with a span of 30.54m. It is situated approximately 1.8km east of Rathmore, Co. Kerry. This bridge carries the N72 over the River Blackwater. The bridge and river form the border between Co. Kerry and Co. Cork.

Duncannon Bridge is scheduled for routine maintenance works which includes repointing of bridge walls and arch barrels.

Results: A total of 5 Daubenton's bats *Myotis daubentonii* were recorded, all in separate crevices under the arches. A total of 11 crevices were marked for retention for bats under the arches.

Recommendations:

- Duncannon Bridge requires a derogation licence from National Parks and Wildlife Service to allow maintenance works to be conducted.
- On the evening immediately prior to works commencing, the structure should be resurveyed for bats.
- A site meeting between bridge engineer/ foreman and ecologist should be conducted to discuss retention of crevices for bats.

PHOTOGRAPHS



Photo 1 – Duncannon Bridge – large bridge with 3 arches spanning the River Blackwater



Photo 2 – Duncannon Bridge – showing some shuttered grouting under eastern arch



Photo 3 – Duncannon Bridge – close-up of shuttered grouting under eastern arch



Photo 4 – Duncannon Bridge – 3 crevices marked behind facing stones



Photo 5 – Duncannon Bridge – 4 crevices marked for retention behind facing stones



Photo 6 – Duncannon Bridge – Daubenton’s bat in marked crevice