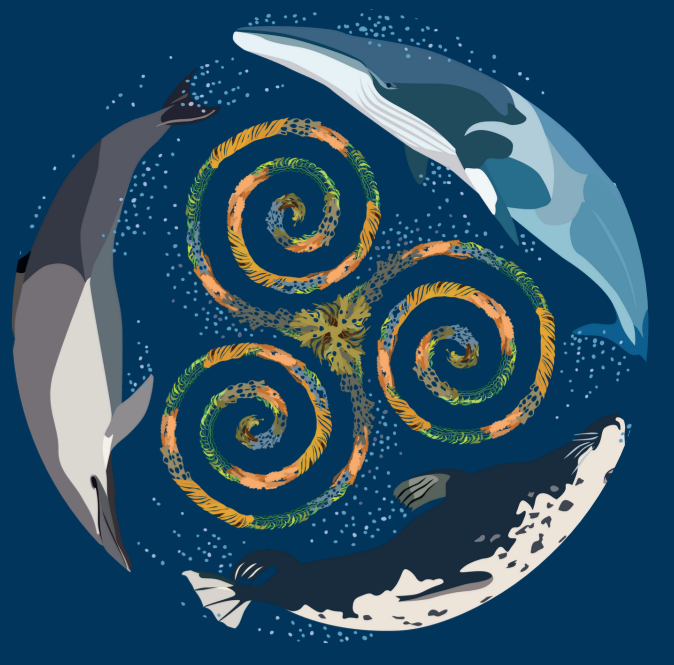




# First Confirmed Fisheries Bycatch in a Rarely Stranded Bottlenose Dolphin (*Tursiops truncatus*) Population from the West Coast of Ireland



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## Introduction

The south-west coast of Ireland supports a small, genetically discrete resident population of bottlenose dolphins (*Tursiops truncatus*). While the Lower River Shannon Special Area of Conservation (SAC) was designated to protect this population, long-term monitoring has demonstrated that their home range extends significantly beyond the estuary's boundaries.

## Stranding Event

On the 23<sup>rd</sup> of July 2025 Irish Whale and Dolphin Group received a report to its Stranding Scheme of a dead bottlenose dolphin with an amputated tailstock on Stradbally Strand, in Brandon Bay, Co. Kerry.



Figure 3 Stranding report image



Figure 1 Stranding Location

## Post Mortem Findings: Peracute Underwater Entrapment (PUE)

An in-situ PME was carried out on this adult, lactating female the morning after the stranding report was received. Due to the incoming tide and limited time only a partial PME was carried out, including a full external examination and an internal examination of the thoracic and abdominal viscera. Pathology and cause of death was validated by James Barnett and Dr. Jim O'Donovan (Regional Vet Lab, Cork)

### External Findings

**Linear lacerations** on the left mandible and gums, the leading edge of the dorsal fin and proximal leading edge of the left pectoral fin. **Amputated tailstock** with straight, well-defined margins consistent with anthropogenic injury.

### Internal Findings

Severe, bilateral **congested lungs** and a moderately **congested liver**. Gas bubbles in the mesenteric blood vessels. Evidence of **recent feeding**.

## Photo-ID Match

Features used to confirm match include the shape of the dorsal fin, the single nick on the mid trailing edge of the fin, multiple nicks on the proximal trailing edge and on the dorsal mid line caudal to the fin. There were also some right sided scarred rake mark associated with those proximal nicks. The linear scar on the right lateral head that extends dorso-caudally.



Figure 2 Photo-ID comparison images alive in May 2025 (left), dead in July 2025 (right)

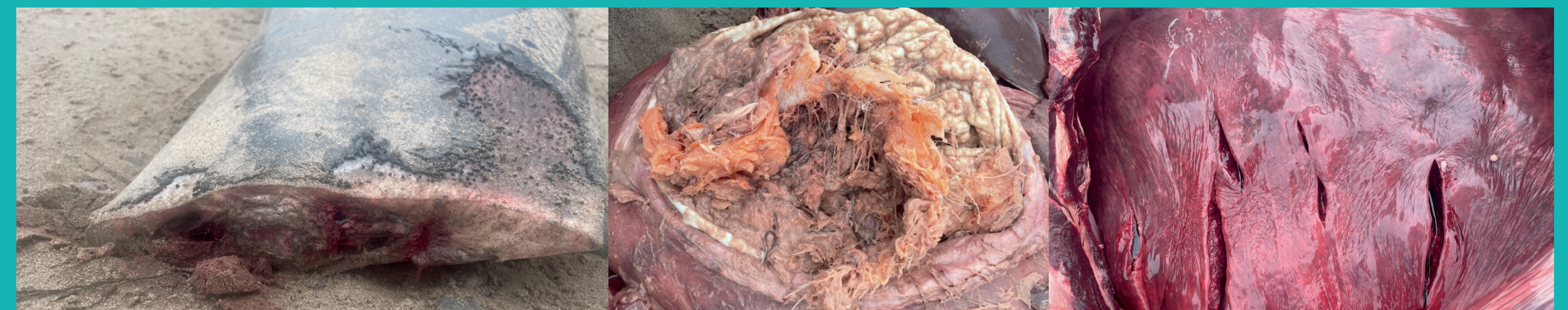


Figure 5: Amputated tailstock, cardiac ingesta, congested lung

## Discussion: A Significant Demographic Loss

While this is the first confirmed case of fisheries bycatch for this resident population, it is **highly unlikely to be an isolated incident**. Genetic sampling of strandings nationwide shows that Shannon dolphin strandings are rare, suggesting that the **vast majority of mortalities in this group go unrecorded**. This bycaught female belonged to a small and vulnerable population of **only 39 reproductive females**; in such a genetically discrete group, the loss of even one breeding individual **could have a massive impact on the population's long-term survival**. Furthermore, as she had a 2-year-old calf that remained nutritionally dependent on her, it is highly improbable that the calf survived without her protection, resulting in a double loss to this fragile population.

## The Population at a Glance

**Genetic Status:** Genetically discrete, resident population (Mirimin et al., 2011).

**Abundance:** 146 ± 23 individuals (Berrow et al., 2022).

**Reproductive Females & Calving Rates:** 39 reproductive females, average annual calving rate of 0.29 young-of-year per reproductive female (Baker et al., 2017). ~ 7–10 calves documented annually (IWDG, unpublished data).

**Vulnerability:** Highly sensitive to adult female mortality; any increase in deaths threatens long-term persistence (Blázquez et al., 2020).

**Core Habitat:** Centered in the Lower River Shannon SAC, with essential range extending to Brandon Bay and Tralee Bay—documented social and foraging hubs (Levesque et al., 2016).

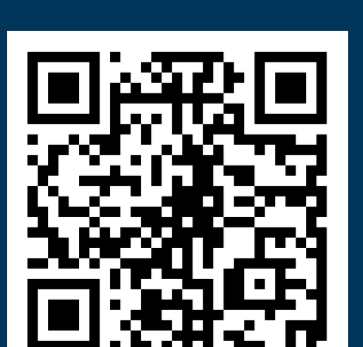


Figure 6: Last sighting of this female with her calf in May 2025

**Acknowledgements:** Sarah O'Neill & Richard Creagh for reporting this stranding to IWDG. Dr. Stephen Comerford and Ailbhe Power for assisting with the PME. Dr. Jim O'Donovan for providing case history oversight (RVL Cork).

### References

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