The Glasgow Naturalist (2025) Volume 28, Part 4

https://doi.org/10.37208/tgn28403

Mass stranding of the scyphozoan jellyfish *Cyanea capillata* at Kames Bay, Isle of Cumbrae, Scotland

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Stranded jellyfish are well known to beach-combers on British beaches in summer. There are five common species in our inshore waters (Trewhella & Hatcher, 2015) but occasional incursions of oceanic waters may bring more exotic species to our shores (O'Reilly & Semler, 2020). Although jellyfish can actively swim, adverse weather can drive them ashore resulting in spectacular mass strandings.

This note records an unusual mass stranding of hundreds of lion's-mane jellyfish (*Cyanea capillata*; Cnidaria, Scyphozoa) of various sizes on the strandline at Kames Bay, Isle of Cumbrae, Scotland, which appeared overnight on 29th/30th August 2025 (Fig. 1). Having lived on the Isle of Cumbrae for over 50 years, I have never before witnessed such large numbers of this species being washed up on Kames Bay. A few milky white specimens of another scyphozoan - the barrel jellyfish *Rhizostoma octopus* - were also evident among the mass of red-brown *C. capillata* but represented under 1% of the strandings.

The Isle of Cumbrae is located in the Firth of Clyde. Substantial numbers of the early life-history stages (scyphistomae) of *C. capillata* have been observed on the submerged rock walls below the kelp zone near Furnace on the west side of Loch Fyne, Argyll (pers. obs.), which is one of the Clyde sea-lochs. The species is therefore a normal component of the Clyde Sea area marine fauna and regular strandings of usually small numbers of this mature jellyfish occur annually at this time of year. The jellyfish overwinters as the small polyp-like scyphistoma stage attached to rocks, and then buds an early swimming stage called an ephyra, which can be caught in plankton nets early in the year.

This mass stranding seems likely to have been a consequence of strong (40-50 m.p.h.) south-westerly winds brought about as a result of the residual impact of ex-hurricane Erin tracking across the Atlantic Ocean from America at the time, perhaps also being exacerbated as a result of higher sea temperatures due to the effects of climate change, and/or the possible ecosystem impacts of overfishing (Pauly *et al.*, 1998). On the receding tide early in the morning of 31st August, however, very few *C. capillata* were evident. The mass-stranded jellyfish had either been washed back into the still rough sea or been buried beneath shifted sand. The

Fig. 1. *Cyanea capillata* stranded at Kames Bay, Isle of Cumbrae, Scotland, 30th August 2025. (A) View across the shore looking west. (B) View looking east. (Photos: Penny Healy)

presence of several specimens half-buried in the sand, each surrounded by a scoured-out halo (observed on the morning receding tide of 1st September), is suggestive of the latter explanation.

It should be noted that it is the tentacles of *C. capillata* that sting, not the umbrella. Dog walkers (see Meadows, 2011) and parents are advised to stop dogs and children respectively touching *C. capillata* (though *R. octopus* is harmless). However, investigation of the underside of the umbrella of *C. capillata* (enabled by rubber gloves), may reveal the presence of the parasitic hyperiid amphipod *Hyperia galba,* with its startling lime-green eyes (see Moore, 1984).

Mass strandings offer the beachcomber a rare insight into the creatures inhabiting the pelagic realm of our coastal waters, and on rarer occasions may include oceanic creatures, such as by-the-wind sailor (*Velella velella*; Cnidaria, Hydrozoa, Porpitidae) or buoy barnacles (*Dosima fascicularis*; Arthropoda, Crustacea, Lepadidae), from much further offshore (The Herald, 2002; Scottish Government, 2011; O'Reilly *et al*., 2023). Nearshore seabed invertebrates, such as starfish (Echinodermata, Asteroidea), may also be subject to mass strandings on rare occasions (BBC, 2025).

I am grateful to my daughter Penny for taking the lion's mane jellyfish photographs, and I thank the anonymous reviewer for helpful comments that improved the manuscript.

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