



Anchovy *Engraulis encrasicolus* (L.) (Pisces: Engraulidae) in Irish and UK Waters
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- Went, A. E. J. (1945) The distribution of Irish char (*Salvelinus spp.*). *Proc. R. Ir. Acad.* **50B**: 167-189.
- (1946) Irish freshwater fishes. *Salmon Trout Mag.* **118**: 248-256.
- (1953) Notes on some Irish char (*Salvelinus spp.*) – 4. *Ir. Nat. J.* **11**: 91-97.
- (1971) The distribution of Irish char (*Salvelinus alpinus*). *Ir. Fish. Invest.* **6(A)**: 5-11.
- Whelan, K. (1989) *The angler in Ireland: game, coarse & sea*. Country House, Dublin.
- Whilde, A. (1993) In Partridge, J. K. (Ed.) *Threatened mammals, birds, amphibians and fish in Ireland. Irish Red Data Book 2: Vertebrates*. HMSO, Belfast.
- Wilson, J. P. F. (1983) The post-glacial colonisation of Ireland by fish, Amphibia and reptiles. *Occ. Pub. Ir. Biogeog. Soc. No. 1*: 53-58.

ANCHOVY *ENGRAULIS ENCRASICOLUS* (L.) (PISCES: ENGRAULIDAE) IN IRISH AND UK WATERS

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During April 1996 a single specimen of anchovy *Engraulis encrasicolus* (L.) measuring 11.8cm T. L. was captured in a *Nephrops* trawl by the MFV 'Skellig Light' (Owner: Mr Michael Quinlan, Renard, Caherciveen, Co. Kerry) at a depth of c300m on the Porcupine Bank (c53°30'N, 13°15'-14°10'W) off the W coast of Ireland.

The current specimen, which was donated to the National Museum of Ireland (NMI 15. 1996), represents the fifth record of anchovy from Irish waters and the first from the Porcupine Bank. Details on all previous records are summarized in Table 1.

Single specimens of anchovy have been recorded infrequently and only at intervals of several years from the W(1), SW(2), S(1) and E(1) coasts. There are no records from the N coast. The first three specimens, taken between July and October, were recorded near the surface in shallow inshore estuarine waters, while the last two specimens, taken in April and May, were captured on or near the bottom in relatively deep offshore waters. Wheeler (1978) noted that "In summer anchovies migrate into inshore waters (while) in winter they move offshore."

Although Went and Kennedy (1976) regarded the anchovy as rare in Irish waters, it is remarkable that the species has not been recorded more frequently considering the large number of records from nearby UK waters. Indeed, Went (1962) noted that it was common in the English Channel and remarked that "In view of its abundance along the French coasts it is surprising that the anchovy should be so scarce along the south coast of Ireland". It is also interesting to recall that prior to obtaining the first specimen of anchovy from Irish waters in Ventry Harbour, Andrews (1870) "had heard of species of small herring that had been taken in the herring nets (in Dingle Bay) of a peculiar silvery brightness". Andrews noted that the anchovy had "been met in several localities on the coast of England", and referred to Couch's (1865) view "that it may be abundantly taken on the Cornwall coast." Andrews concluded that "it is not unlikely but that in the autumn season the anchovy, with nets of a proper mesh, may be taken in Dingle Bay and other bays on the SW coast." Day (1880-84) remarked that "They are only taken by chance in drift nets or seines for sand-eels, as their small size enables them to pass through the meshes of such nets as are generally used by the drift-net fishermen".

There are numerous references to the anchovy in UK waters during the last century and more recently since the early 1950s. Anchovies have been recorded from all around

the U.K. coast including: S(Hampshire), SW(Devonshire and Cornwall), Irish Sea (Bristol Channel, NW Wales, Lancashire and Solway Firth), W Scotland (Dubh Artach and Outer Hebrides), Orkney Islands, NE Scotland (Pentland Firth, Moray Firth, Buchan Deep), SE Scotland (Firth of Forth and St. Abb's Head), NE England (Northumberland, Durham and Yorkshire), E (Lincolnshire, Norfolk, and Suffolk and SE (Thames Estuary).

In some years during the 19th century, anchovies appear to have been relatively abundant along the SW coast of England. For example, in November 1871, upwards of 150 000 were taken in seine nets set for pilchards (*Sardina pilchardus* Walbaum) off Meevaggissey (Cornwall), and were used as farm land manure (Day 1880-84). Indeed, Couch (1865) remarked that if finer mesh nets were used "sufficient (quantities) might be taken on the coast of Cornwall to supply the amount of what is consumed in our own country." Day (1880-84) noted that in some summers vast numbers were taken in the Bristol Channel off Swansea. Indeed, Yarrell (1859) stated that he purchased six pounds (2.7kg) of anchovies in Swansea market for one shilling (£0.05). He also noted that "it is said to be sold frequently in Liverpool market."

Between the mid 1950s and mid 1960s anchovies appear to have been relatively frequent in their occurrence in Scottish waters, particularly off the NE coast (Rae and Wilson 1952, 1954, 1956-57, Rae and Lamont 1958-64, Rae and Pirie 1967). The species appears to have been present in relatively large numbers in the North Sea during July 1961; five specimens were taken in the Solway Firth (NE Irish Sea: Rae and Lamont 1962) and a single specimen was captured in the Castletown River, Co Louth (NW Irish Sea: Went 1962).

During the next 10 year period (mid-1960s to mid-1970s) very few anchovy were recorded from Scottish waters (Jones and Pirie 1973-74) but the species appears to have been relatively common along the NE, E and SE coast of England. Several specimens were taken in the winter sprat (*Sprattus sprattus* L.) fishery off the NE coast (Blacker 1974-78) and during the summer drift-net fishery off the SE coast (Blacker 1970, 1977-78). Significant numbers were also recovered from power station cooling water intake screens located on the lower Thames (Huddart and Arthur 1971, Wheeler and Blacker 1972, Wheeler 1979) and Severn Estuary (Claridge *et al.* 1986). For unknown reasons, relatively few specimens appear to have been recorded in UK waters since the 1970s (Blacker and Millner 1984, Henderson pers. comm.).

Although the anchovy is known to have spawned in NW European waters during historical times, very little appears to be known about the current status of the species. For example, the anchovy previously spawned off the Dutch coast and in the Zuider Zee between May and July (Jenkins 1936). While the Zuider Zee population was presumably lost following the construction of the Afsluitdijk, the current status of North Sea stocks is unknown. There are some anecdotal references which suggest that the anchovy may have previously spawned in UK waters. For example, Day (1880-84) remarked that "on June 9, 1878, off Southport, he (Mr. Jackson) took some dozens in a shrimp trawl on a sandy bottom, about half a mile (0.8km) off shore . . . many were full of spawn and so tender that they burst with the slightest strain". At Swansea, Couch (1865) found anchovy "heavy with spawn in September", while Jenkins (1936) found anchovy eggs in the River Ribble (NW Irish Sea) during June 1896. More recently, Blacker and Millner (1984) captured a maturing male off Pakefield Beach (Suffolk) on 28 May 1981.

In NW European waters, Wheeler (1969) remarked that "the anchovy is not uncommon in the English Channel and the Southern North and Irish Seas (while) elsewhere it seems to be vagrant". Svetovidov (1979) described the distribution in the NE Atlantic from the Skagerrak, Kattegat and British Isles southwards to Morocco, including the Mediterranean, Adriatic, Aegean, Black and Azov Seas. More recently, Whitehead (1990) referred to its distribution as follows: "northward to Bergen (Norway) and southward to Cape Town (South Africa), then NE to East London, perhaps to Durban (SW Indian Ocean)".

Table 1. Irish records of anchovy *Engraulis encrasicolus* L.

Date	Location	Method	T.L. (cm)	F.L. (cm)	Wt. (g)	Reference
Autumn 1869	Ventry Harbour Co Kerry	herring net	15.0	-	-	Andrews (1870)
Oct. 1951	Kinsale Harbour Co Cork	salmon net	16.3	15.6	-	Kennedy (1952)
21.07.1961	Castletown River Co Louth	beach seine	15.3	14.1	25.0	Bracken & Kennedy (1967)
10.05.1978	W New Ground Dingle Bay Co Kerry	trawl	16.0	-	35.0	Minchin & Molloy (1980)
April 1996	Porcupine Bank	<i>Nephrops</i> trawl	11.8	-	-	This paper

Wheeler (1979) remarked that "before the closure of the Zuider Zee there was a considerable fishery for anchovies in this vast low-salinity area, but although the fish is still common on the Dutch coast it is not exploited to the same extent". Wheeler (1978) noted that "The anchovy is not fished for in northern (European) waters, but off southern Europe and in the Black Sea it is an important commercial fish."

Although the current paucity of records would seem to suggest that the anchovy is rare in Irish waters, it is possible that the species, because of its small size, is rarely captured and/or recognized. Clearly more information is required and all records should be noted.

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REFERENCES

- Andrews, W. (1870) Ichthyological notes. *Proc. Nat. Hist. Soc. Dubl.* **6**: 32-35.
- Blacker, R. W. (1970, 1974-78) English observations on rare fish in 1969, 1972-76. *Annl. Biol., Copenh.* **26**: 279-280; **29**: 180-181; **30**: 208-209; **31**: 183; **32**: 184-185; **33**: 183-184.
- & Millner, R. S. (1984) English observations on rare fish in 1981. *Annl. Biol., Copenh.* **38**: 206.
- Bracken, J & Kennedy, M. (1967) Notes on some Irish estuarine and inshore fishes. *Ir. Fish. Invest.* **3B**: 1-28.
- Claridge, P. N., Potter, I. C. & Hardisty, M. W. (1986) Seasonal changes in movement, abundance, size composition and diversity of the fish fauna of the Severn estuary. *J. mar. biol. Ass. U.K.* **66**: 229-258.
- Couch, J. (1865) *A history of the fishes of the British Islands* **4**: 125-127. Groombridge, London.
- Day, F. (1880-1884) *The fishes of Great Britain and Ireland*. Williams & Norgate, London.
- Huddard, R & Arthur, D. R. (1971) Lampreys and teleost fish, other than whitebait, in the polluted Thames estuary. *Int. J. Environ. Studies.* **2**: 143-152.
- Jenkins, J. Travis (1936) *The fishes of the British Isles*. 2nd edition. Warne, London.
- Jones, R. & Pirie, S. F. (1973-74) Scottish records on rare fishes 1971-72. *Annl. Biol., Copenh.* **28**: 221; **29**: 180.
- Kennedy, M. (1952) Occurrence of the anchovy *Engraulis encrasicolus* (L.) in Kinsale Harbour. *Ir. Nat. J.* **10**: 274-275.
- Minchin, D & Molloy, J. (1980) Notes on some fishes taken in Irish waters during 1978. *Ir. Nat. J.* **20**: 93-97.
- Rae, B. B. & Lamont, J. M. (1958-64) Rare fishes: Scotland. *Annl. Biol., Copenh.* **14**: 85-86; **15**: 78; **16**: 104-105; **17**: 109; **18**: 96-97; **19**: 82; **20**: 109-110.

- & Pirie, S. F. (1967) Scottish records on rare fishes 1964. *Annl. Biol., Copenh.* **23**: 211-212.
- & Wilson, E. (1952, 1954, 1956-57) Rare fishes: Scotland. *Annl. Biol., Copenh.* **8**: 115-116; **10**: 117; **12**: 103; **13**: 95-96.
- Svetovidov, A. N. (1979) Engraulidae. In Hureau, J. C. & Monod, Th. (eds) *Check-list of the fishes of the north-eastern Atlantic and of the Mediterranean. Clofam.* **1**: 111-112. UNESCO, Paris.
- Went, A. E. J. (1962) Rare fishes taken from Irish waters in 1961. *Ir. Nat. J.* **14**: 33-35.
- & Kennedy, M. (1976) *List of Irish fishes*. 3rd edition. Stationery Office, Dublin.
- Wheeler, A. (1969) *The fishes of the British Isles and north-west Europe*. MacMillan, London.
- (1978) *Key to the fishes of northern Europe*. Warne, London.
- (1979) *The tidal Thames: the history of a river and its fishes*. Routledge & Kegan Paul, London.
- (1985) *The world encyclopedia of fishes*. MacDonal, London & Sydney.
- & Blacker, R. W. (1972) Rare and little known fishes in British seas in 1968 and 1969. *J. Fish. Biol.* **4**: 141-170.
- , ————— & Pirie, S. F. (1975) Rare and little known fishes in British seas in 1970 and 1971. *J. Fish. Biol.* **7**: 183-201.
- Whitehead, P. J. P. (1984) Engraulidae. In Whitehead, P. J. P., Bauchot, M. T., Hureau, J. C., Nielson, J. & Tortenese, E. (eds) *Fishes of the north-eastern Atlantic and the Mediterranean 1*: 282-283. UNESCO, Paris.
- (1990) Engraulidae. In Quérou, J. C., Hureau, J. C., Karrer, C., Post, A. & Saldanha, L. (eds) *Check-list of the fishes of the tropical eastern Atlantic. Clofeta.* **1**: 228-229. JNICT, Portugal.
- Yarrell, W. (1869) *A history of British fishes*. 3rd edition. **1**: 151-154. John Van Voorst, London.

**FIRST RECORD OF THE ATLANTIC FOOTBALL FISH
HIMANTOLOPHUS GROENLANDICUS (REINHARDT, 1837) (PISCES:
LOPHIIFORMES, CERATIOIDEA, HIMANTOLOPHIDAE) FROM
IRISH WATERS**

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On 22 June 1989 Ms Rosemary Rudd ('Westgate', Waterville) discovered the desiccated head of an unusual fish on the beach near Waterville (c51°49'N, 10°09'W), Co. Kerry. The late Dr E. Bertelsen (Zoology Museum, University of Copenhagen) examined the photograph of the head and concluded that it belonged to a species of *Himantolophus*, most probably *H. groenlandicus* (Reinhardt, 1837), the Atlantic football fish.

During mid-May 1996 a female specimen of *H. groenlandicus* was captured by the MFV 'John Colm' (Skipper: Mr Andrew O'Connor, Dingle) while trawling at a depth of c240m W Achill Island (c54°N 12°W), Co Mayo. The current specimen represents the first authenticated record of *H. groenlandicus* from Irish waters.

The following morphometric and meristic data were recorded: T.L. 32.5cm; S.L. 22.5cm; Wt 1.5kg; illicium 49% S.L.; esca with a pair of truncated distal appendages surrounded by 4 swellings; 1 unbranched tentacle on distal anterior side of esca bulb; 1 bifurcated tentacle behind esca pore; 4 bifurcated tentacles (3 lateral pairs) on base of esca pore; dorsal fin rays 6; caudal 8; anal 4; and pectoral 12.

Wheeler (1969, 1978) remarked that *H. groenlandicus* has occasionally been captured on the deeper fishing grounds of the European Atlantic, especially off the Icelandic coast and on the Iceland-Faroe Ridge. While the species has been recorded from Icelandic waters almost annually since the early 1980s (Jónsson *et al.* 1982-89, 1991-97), it still appears to be relatively rare in southern parts of NW Europe. For example, the