

EVIDENCE OF WHALING IN THE NORTH SEA AND ENGLISH CHANNEL DURING THE MIDDLE AGES

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Abstract

Although cetaceans are not now abundant in the North Sea, historical evidence indicates that they were common there and in the English Channel during the Middle Ages and earlier. Whales were probably hunted regularly in this area from at least the 9th century onward, mostly by Flemings and Normans. Biscayan whales (*Eubalaena glacialis glacialis*) and perhaps also gray whales (*Eschrichtius gibbosus*) – if this species did survive in the Atlantic until mediaeval times – may have been the main species taken; both live near the coast and are relatively easy to catch. A decline in their abundance in the late Middle Ages seems likely and may have been caused in part by hunting. Evidence of this early whaling includes references to the availability of whale meat in mediaeval markets and anecdotes about the intervention of saints in whale hunts. Harbour porpoises (*Phocoena phocoena*), now the only cetacean commonly found in the North Sea, were hunted along its southern coast and in the English Channel before the Dutch fishery for them began in the 16th century. Other small cetaceans were probably also taken.

Résumé

Bien que les cétacés ne soient pas actuellement abondants en mer du Nord, les preuves historiques montrent qu'ils y étaient communs, ainsi que dans la Manche, au Moyen Age et durant les périodes antérieures. Les baleines ont probablement été chassées avec régularité dans cette région depuis au moins le 9ème siècle, surtout par les Flamands et les Normands. Les baleines de Biscaye (*Eubalaena glacialis glacialis*) et peut-être aussi les baleines grises (*Eschrichtius gibbosus*) – si cette espèce réussit à survivre dans l'Atlantique jusqu'à l'époque médiévale – peuvent avoir été les principales espèces capturées. Toutes deux vivent près de la côte et sont relativement faciles à capturer; un déclin de leur abondance semble probable à la fin du Moyen Age; il peut avoir été partiellement provoqué par la chasse. Les preuves de cette chasse comprennent des références à la présence de viande de baleine sur les marchés médiévaux et à des anecdotes sur l'intervention des saints pendant la chasse. Le marsouin commun (*Phocoena phocoena*), le seul cétacé actuellement répandu dans la mer du Nord, était chassé le long de sa côte sud et dans la Manche avant le début de la pêcherie hollandaise qui les exploita à partir du 16ème siècle; d'autres petits cétacés étaient aussi probablement capturés.

Extracto

Aunque hoy día los cetáceos no abundan en el Mar del Norte, hay pruebas históricas de que durante la Edad Media y épocas anteriores eran abundantes tanto en ese mar como en el

Canal de la Mancha. Probablemente los flamencos y los normandos se han dedicado a la caza de ballenas en esa zona desde al menos el siglo IX. Tal vez las principales especies capturadas hayan sido la ballena de Vizcaya (*Eubalaena glacialis glacialis*) y quizás también *Eschrichtius gibbosus*, si esta especie sobrevivió en el Atlántico hasta la época medieval; ambas viven cerca de la costa y son relativamente fáciles de capturar. Parece probable que en la tarda Edad Media su abundancia haya disminuido, quizás debido, en parte, a la caza. Entre las pruebas de que ya entonces se cazaba la ballena, pueden citarse las referencias a la venta de carne de ballena en los mercados medievales y algunas anécdotas sobre la intervención de los santos en la caza de las ballenas. La marsopa común (*Phocoena phocoena*), que hoy es el único cetáceo que se encuentra frecuentemente en el Mar del Norte, se cazaba también en la costa meridional del Mar del Norte y en el Canal de la Mancha antes de que los holandeses iniciaran su explotación en el siglo XVI. Probablemente se capturaban también otros pequeños cetáceos.

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Introduction

In most books, whaling is given as a classic example of uncontrolled predation by man on a marine resource and the period of Arctic whaling around Spitzbergen for the Greenland whale (1611-1719) is generally cited as the first of the unwise steps in the whaling industry. Several texts, however, also draw attention to the fact that the Biscayans had an active whaling industry in earlier centuries (from the 11th century onward) and that they were probably responsible for the drastic reductions in the numbers of Biscayan right whales in the Northern Hemisphere. Only a few authors are aware of the fact that whaling existed in still earlier days in other European seas, and that it was practised in the North Sea and English Channel during the Middle Ages, certainly from the 9th century onward. Evidence of this early whaling is quite scarce and is distributed throughout a number of texts. Study of the assembled references, however, leads one to the opinion that the North Sea probably had a dense whale population that disappeared because of uncontrolled whaling. These mediaeval whale hunters were mostly Flemish and Norman, and hunted long before

the Biscayans. Slijper (1958) has already referred to this hunting, even suggesting that the Biscayans may have learned whaling from the Flemish and the Normans, who may have learned it from the Norsemen.

Present state of cetaceans in the North Sea

At present, cetaceans are not at all abundant in the North Sea. Only the harbour porpoise, *Phocoena phocoena*, is commonly found, although its numbers have decreased considerably during the last decades. Three other species, *Tursiops truncatus*, *Delphinus delphis*, *Lagenorhynchus albirostris*, are of quite regular appearance, and the pilot whale, *Globicephala melaena*, is normally found in the northern part, even in large schools, but very rare in the southern North Sea. Twenty-two other species have been observed (Schultz, 1970) but always exceptionally or in limited numbers. On the southernmost border of the North Sea, the Flemish coast, 18 species have been found (De Smet, 1974).

Among the whale species, the minke

whale, *Balaenoptera acutorostrata*, is the least rare: Schultz (1970) lists some 80 cases of strandings or catches between 1824 and 1970; this means more or less once every 2 years. The common fin whale, *Balaenoptera physalus*, has been reported some 75 times from 1595 onward (once every 6 years), the blue whale, *Balaenoptera musculus*, 16 times from 1594 onward (once every 25 years), the sei whale, *Balaenoptera borealis*, 7 times from 1590 onward (once every 50 years) and the humpback whale, *Megaptera novaeangliae*, 5 times from 1545 onward (once every 80 years). The sperm whale, *Physeter catodon*, and odontocete, is of more regular appearance, having been reported some 60 times from 1531 onward, but only old bulls are known to visit the North Sea, sometimes in small herds. The presence of the Biscayan whale, *Eubalaena glacialis glacialis*, has been noted in 1658, 1682, 1751, 1784 and 1872, and there are also cases from the Baltic Sea in 1365 and 1489 (Schultz, 1970). Fossil remains of the grey whale, *Eschrichtius gibbosus*, point to this species' presence in earlier times.

It is clear, therefore, that such a paucity of whales during the last centuries could not sustain any profitable whaling industry. Nevertheless, the North Sea with an area of 575 000 km² and its high productivity offers a proper habitat for several species of whales. During the Miocene and Pliocene periods, whales and other cetaceans were abundant in the sea that corresponds to the North Sea of the Holocene. Huge quantities of fossil bone have been discovered, especially in the region of Antwerp, from which many fossil species have been described.

Evidence of whale abundance in Roman and mediaeval times

Although during recent centuries whales were rare in the North Sea, this was certainly not the case in earlier times. This conclusion is supported by the following facts:

- (i) Whale bones, often engraved, have been found in many human settlements around the North Sea and are very numerous in several places (Clark, 1947; van Beneden, 1886).
- (ii) The Roman poet Juvenal speaks in his Satire X, verse 14, of a "Britannic whale" (*Ballaena brittanica*), which indicates that:
 - (a) a species of whale was found along the coast of Britain, presumably the North Sea coast or the Channel coast;
 - (b) this species was well known to the Roman residents of the British Isles, which would hardly be the case if it were a cetacean that was only seen at Sea;
 - (c) this species was recognized as being different from the whales seen in the Mediterranean Sea.
- (iii) A fishery for large sea animals, which often used harpoons and was in an organized condition certainly as early as 875 (see examples below), existed in several places along the coasts of the North Sea and the Channel.
- (iv) Whale meat was normally found in many mediaeval fish markets (see examples below).
- (v) In 1004, several ships sank in the English Channel after encounters with whales, a fact cited by Fischer (1881), van Beneden (1886) and Thomazi (1947).
- (vi) The mediaeval chronicler Vilhelmus Brito or Guillaume le Breton (12th century) recounts that the Duke of Boulogne had baleen plates on his helmet, taken from whales found in the English Channel.

- (vii) The making of ornaments from baleen plates was a business activity in the city of Rouen, which was controlled by ordinance of King Charles II in 1403 (Cochin, 1935). This argues that whales were being landed regularly.
- (viii) In the village of Saint-Vaast-la-Hougue (in Normandy), whale bones were so numerous that they had many different uses (Thomazi, 1947).

Evidence of whale hunting during the Middle Ages

Several authors (Vaucaire, 1941) have doubted if true whaling existed in the Middle Ages, because a later authority, Olaus Magnus, when speaking of whales in the northern countries in 1555 gave as an example the flensing of a stranded animal. But evidence of whaling in the mediaeval centuries has come to us in several texts. A few of them are just anecdotes about miraculous huntings that involved the assistance of some saint, but they reveal that hunting of whales was a normal undertaking.

In 875, some fishermen, probably from Arras, had a dispute with other fishermen along the Flemish coast as how to divide the catch when a whale was taken. They then went to sea with only 2 ships and, having invoked Saint-Vaast (*Sanctus Vedastus*), they captured an "enormous fish", while the other fishermen with their many ships did not capture any. Other citations in this book on the miracles of the saint lead one to believe that whaling (the text often speaks of the whale) was a common activity during that period along the Flemish coast. The date of 875 has been cited by several authors, but in greatest detail by Vaucaire (1941).

At the end of the 10th century, another story on miraculous whale hunting with the intervention of Saint-Bavo of Ghent speaks of

harpooning an animal that came up from the depths and made several appearances at the surface (Lestocquoy, 1948).

A similar miraculous happening in 1116 gives more details: the Flemish fishermen had wounded a whale with their arrows and lances and were encircling the animal with their ships. The angry animal blew rays of water into the air, sprang out of the water, disappeared and reappeared and attacked the hunters so intensely that the latter made an oath to Saint-Arnulf, promising him a piece of meat from this whale (Fischer, 1881; Degryse, 1940; Cochin, 1935; Lestocquoy, 1948).

Other proofs of whaling during the Middle Ages include:

- (i) A mediaeval text cited by Beddard (1900), probably of English origin and dating from before 1000, makes it clear that whale hunting was considered to be a dangerous business in which many ships were needed.
- (ii) Whaling also went on in other parts of Europe, especially along the Norwegian coast. Many Scandinavian sagas speak of whaling, even the old Edda (Vaucaire, 1941) and especially the King's Mirror, a book on Iceland written in Norway in the 12th century. Best known is a report written around 890, probably in 887 (Beddard, 1900) to the English King Alfred the Great by the Norwegian explorer Ocher from Hålogoland, who sailed to the region of present-day Tromsø "as far as the whalers go" and who talks of whales 50 ft long.
- (iii) In 1098, a corporation of "wallmanni" (whalers) was founded in Normandy. This corporation has been cited by several authors, including Curvier, but it has often been doubted if it was really whales they hunted or only porpoises. However, since it is known that they presented baleen plates to the Abbey

of Montebourg (Lestocquoy, 1948), there can be no doubt that they whaled.

- (iv) The fishermen of Boulogne (in a part of the mediaeval Flemish city of Boonen) were obliged to give a portion of the meat from every whale they caught to the Abbey of Saint-Wulmar, and this custom was already practised before 1121 (Degryse, 1944). Many other abbeys had similar rights and priorities (Vaucaire, 1941), but it is not clear if in many cases it concerns caught or stranded animals and if many of the "whales" were not simply porpoises or sharks.
- (v) In 1178, when the Flemish Count Philip of Alsace returned from a long voyage, he received from the population of Bruges a monstrous beast (probably a Biscayan whale, see below) that had been taken a few days before (Degryse, 1940).
- (vi) According to the mediaeval chronicler Vincent de Beauvais (1272), the inhabitants of the "German" coasts (location indeterminate) hunted whales by making noises with kettledrums and other instruments. Another writer of that period, Albertus Magnus, one of the most illuminated spirits of the Middle Ages, tells that these people hunted with harpoons, thrown by hand or by balistas (Fischer, 1881; van Beneden, 1886; Thomazi, 1947).
- (vii) In the 9th century (832), the Abbey of Saint-Denis in Paris owned a place in Normandy on the Cotentin Peninsula where "whales" were hunted and flensed (Degryse, 1940; Lestocquoy, 1948).
- (viii) According to Vaucaire (1941), "fishes" 50 ft long were taken in the south of the Seine by order of the Abbey of Jumièges. Other sources, however, mention fishes

only 5 ft long and this suggests that the harbour porpoise was the species being taken.

- (ix) In 1456, the Duke of Burgundy, Count of Flanders, had a whaling ship on the North Sea (Filliaert, 1944).
- (x) Even in 1606 (i.e., 5 years before the start of extensive hunting for the Greenland whale), whaling ships were still leaving the harbour of Bruges.
- (xi) Van Deirse (1966) has proved that there are signs of whaling in Holland before the year 1611, the first whaling year in Spitzbergen.

The role of whale meat in the Middle Ages

The role of whale meat in the mediaeval markets may be judged from many details. It is clear from the regularity with which whale meat occurred in these markets that it cannot have come from stranded animals alone and that there must have been regular landings. In many cases, these animals might have been dolphins and porpoises. However, the use of the words "balaena" and "Walfisch" is sufficiently common in the texts, and the quantities of meat such to make it clear that large animals must have been present. Examples of such citations include the following:

- (i) In a reference from 1024 on Arras, whale meat is cited as a product with taxation for every 100 portions (Degryse, 1944).
- (ii) The city of Boulogne was a centre of whale meat trading from the 11th century onward (Degryse, 1944).
- (iii) A report on the market of the Flemish town Nieuwpoort in 1163 includes whale

- meat (“partem ceti”) with taxation on every portion (Degryse, 1944).
- (iv) Whale meat was sold in the Flemish city of Damme in 1252 (Slijper, 1958).
 - (v) The market of Calais also sold whale meat and in 1300, the Count of Artois bought 33 pieces there, weighing a total of 380 lb (Degryse, 1940).
 - (vi) One hundred “whales” were transported to Paris on the Seine in 1315 (Cochin, 1935).
 - (vii) At the wedding of the Burgundian Duke Charles the Bold to the Flemish Countess Margareta at Bruges, the wedding meal included a “whale” (perhaps only a porpoise).
 - (viii) The Flemish Count Louis of Male often sent whale meat to his daughter Margareta at the Burgundian Court, e.g., in 1371 and 1381 (Lestocquoy, 1948; Slijper, 1958).

Species taken

The question remains, however, as to the identity of the whales which were the victims of this mediaeval hunting in the North Sea and the English Channel. Detailed accounts are too few to provide any conclusive evidence but the species involved can be postulated by a process of elimination.

Of the large whales, several can easily be excluded from consideration. First of all, the Greenland whale, *Balaena mysticetus* could hardly have been involved, because this animal normally does not leave the ice fields, although a specimen was found in the Sea of Japan (Nishiwaki and Kasuya, 1970). Fossil remains of this species in the North Sea basin date back to the Ice Ages (Jux and Rosen-

bauer, 1959). The balaenopterids are ocean dwellers and fast swimmers, who until 1864 when the harpoon gun was invented, remained beyond the reach of whalers. Only stranded specimens may have attracted people's interest. The sperm whale, *Physeter catodon*, is a species of tropical waters and only an irregular visitor to the North Sea. It is quite possible that in a few cases, especially when the fishermen had to invoke the assistance of the saints, it was this species that they were hunting, but it could not have been the object of a regular business.

This leaves only 2 species of great whale, the Biscayan or black whale, *Eubalaena glacialis glacialis*, and the grey whale, *Eschrichtius gibbosus*.

The Biscayan whale is a slow-swimming species, approximately 15 m long with a thick layer of fat. It is very widely distributed throughout the world – 3 subspecies are recognized at present. This species has always been an easy prey for whalers in several areas of the world. The quite good documentation of the last century shows that the southern sub-species (or species?), *Eubalaena glacialis australis*, which was considered as being unbelievably abundant in the beginning of the century (Harmer, 1928) was reduced to the verge of extinction some 50 years later. In the latter part of the Middle Ages, each of at least 20 fishing towns on the Bay of Biscay captured some 3 whales per year, until the species became more and more rare, and from the 1600s onward only appeared irregularly. The diminishing numbers of whales in their waters induced the Biscayans to undertake longer voyages into the Atlantic Ocean and perhaps to other seas (van Beneden, 1878, even thinks that they hunted in the English Channel and the North Sea, but no proof of this has yet been provided). It is possible that during their yearly migration the Biscayan whales not only visited the Bay of Biscay but also the English Channel and the North Sea, where they fell an easy prey to the specialized fishermen. The location of Boulogne and Calais near the isthmus between both seas put these cities in a

very favourable position for predation on this migrating species.

A few facts support the supposition that *Eubalaena* was involved in this early whaling.

The short description given by a chronicler of a whale 42 ft long, caught near Ostend in 1178 and presented to the Flemish Count Philip of Alsace, says that the snout resembled the beak of an eagle. This probably refers to the typical curvature of the lips of this species (De Smet, 1974).

Many ribs, vertebrae and jaw bones found near the Flemish coast in Belgium and France (Ostend, Furnes, Mardyck, Calais) and even far inshore (Guemps in northern France) and in Zealand, Middelburg (De Smet, 1974) have been identified by van Beneden as belonging to *Eubalaena*. These bones are present in human settlements of different ages and it is possible that they come from stranded animals; it is likely however, that this species was far more abundant than at present.

The other possible species, the grey whale, *Eschrichtius gibbosus*, would seem to be easily ruled out because it is at present extant only in the North Pacific Ocean. But as early as 1936, from evidence derived from the discovery of several remains of this species in Europe, van Deinse and Junge states that the extinction of this species in the Atlantic Ocean may have occurred much later than generally believed. These authors propose that the "scrag-whale" described by Dudley in 1725 as one of the whales hunted near the northeast coast of America, and repeatedly cited by several authors in the 1700s, is none other than this species. Recently, Fraser (1970) has supported this opinion by finding that a whale described in a 17th century Icelandic book must be the grey whale. Thus, it would not be out of the question to assume that in the Middle Ages the grey whale was still present in the eastern part of the North Atlantic Ocean and that it annually visited the North Sea and even the English Channel for calving. Several places along the coast of the North Sea, e.g., the Rhine-Scheldt-Meuse delta and the Wadden Sea, would provide excellent calving grounds,

comparable to those frequented by this species in Baja California. The story that in the mouth of the Seine "fishes" 50 ft long were repeatedly caught would fit quite well with such an assumption. Re-examination of the subfossil whale bones of the European coasts would probably provide more concrete information on the presence or absence of this species in European waters during the Middle Ages.

Hunting of smaller species

The catching of smaller cetaceans has also been a regular business in several places on the coasts of the North Sea. There is no doubt that several of the references given above could refer not to large whales but to porpoises and dolphins.

Before the well-known and large-scale take of harbour porpoises began between the Danish islands in the 16th century, active porpoise hunting had occurred elsewhere. In the Flemish village of Wenduine, hunting started in 1340, after an official order had been obtained, because of the destruction that the harbour porpoise caused to the fishermen's nets (De Smet, 1974). In the markets of the Flemish towns of Ypres, Damme and Nieuwpoort, porpoise meat was among the most common products (Degryse, 1944). In Normandy (Thomazi, 1947) this species was very often caught in several places, especially near Fécamp and at the mouth of the Seine near Jumièges, from where it was exported to Paris, London or other large towns. King Henry VI of England liked the meat of this porpoise very much, according to a charter of 1426 (Slijper, 1958), as did his son, Henry VII.

Mediaeval texts also often refer to an animal called "*crassus piscis*" (fat fish), "craspois" or "graspois". It is not clear if this refers to dolphins, but the animal in question was found regularly in mediaeval markets (Degryse, 1944; Lestocquoy, 1948; Fischer, 1881; Cochin, 1935).

Conclusions

If true whales are rare at present in the North Sea and English Channel, despite the fact that Roman and mediaeval texts give the impression of their regular occurrence, it is clear that the number of animals must have decreased considerably during the late Middle Ages. One of the causes of this phenomenon may have been over-exploitation by man. If grey whales still existed in these waters during the Middle Ages (a fact still unproven), they must have been easily killed, just as they were during the 1800s on the east and west coasts of the North Pacific Ocean, even by primitive hunting methods. The numbers of Biscayan whales, whose past occurrence in the North Sea is proved by irregular cases in later centuries and by many subfossil findings, must have declined seriously. As this species apparently recovers very poorly, even with good protection, it is not surprising if hunting over a long

time period has caused its numbers to drop consistently. In this area, the pelagic balaeopterids have not taken over the ecological niche left vacant by the demise of the slow-swimming coastal species. Thus, the North Sea is at present uninhabited by large cetaceans.

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References

- BEDDARD, F.E., A book of whales. London, John Murray, 1900 320 p.
- BENEDEN, P.J. VAN, Un mot sur la pêche de la baleine et les premières expéditions arctiques. *Bull. Acad. R. Sci. Belg. (2° Sér.)*, 46:966-86.
- , Histoire naturelle de la baleine des Basques (*Balaena biscayensis*). *Mém. Couronnés Acad. R. Sci. Belg.*, 36(5):44 p.
- CLARK, J.C.D., Whales as an economic factor in prehistoric Europe. *Antiquity*, 21:84-104.
- COCHIN, J., Introduction à l'histoire des pêches maritimes en France. In *Manuel des pêches françaises. Mém. Off. Sci. Tech. Pêch. Marit.*, (9):17-83.
- DEGRYSE, R., De Vlaamache walvischvangst in de Middeleeuwen. *Biekorf*, pp. 20-3.
- , Vlaanderens Haringbedrijf in de Middeleeuwen. 1944 Antwerpen, *Seizoenen*, (49):108 p.
- DEINSE, A.B. VAN, Sedert waneer is de walvisvaart vanuit Nederland bedreven? *Lutra*, 8:17-22.
- DEINSE, A.B. VAN and G.C.A. JUNGE, Recent and older finds of the California grey whale in the Atlantic. *Temminckia*, 2:161-88.
- FILLIAERT, J., De laatste Vlaamsche Ijslandvaarders. 1944 Tielt, Lannoo, 228 p., (2nd ed.).
- FISCHER, P., Cétacés du sud-ouest de la France. *Actes Soc. Linn. Bordeaux*, 25:5-219.
- FRASER, F.C., An early 17th century record of the California grey whale in Icelandic waters. In *Investigations on Cetacea*, edited by G. Pilleri. Berne, Brain Anatomy Institute, vol. 2:13-20.
- HARMER, S.F., The history of whaling. *Proc. Linn. Soc. Lond.*, 140:51-95.
- JUX, U. and K.A. ROSENBAUER, Zum Vorkommen von Cetacea-Resten in Jungpleistozänen Fluss-

- blagerungen der Niederrheinischen Bucht.
Neues Jahrb. Geol. Palaeontol., 108:81-126.
- LESTOCQUOY, J., Baleine et ravitaillement au moyen âge.
 1948 *Rev. Nord*, 117:39-43.
- NISHIWAKI, M. and T. KASUYA, A Greenland right whale
 1970 caught at Osaka Bay. *Sci. Rep. Whales Res.*
Inst., Tokyo, (22):45-62.
- SCHULTZ, W., Über das Vorkommen von Walen in der
 1970 Nord- und Ostsee (Ordn. Cetacea). *Zool. Anz.*,
 185:172-264.
- SLIJPER, E.J., Walvissen. Amsterdam, Centen, 524 p.
 1958
- SMET, W.M.A. DE, Inventaris van de walvisachtigen
 1974 (Cetacea) van de Vlaamse kust en de Schelde.
Bull. Inst. R. Sci. Nat. Belg. (Biol.), 50(1):
 156 p.
- THOMAZI, A., Histoire de la pêche. Paris, Payot, 645 p.
 1947
- VAUCAIRE, M., Histoire de la pêche à la baleine. Paris,
 1941 Payot, 262 p.