

On two specimens of rough-toothed dolphin (*Steno bredanensis* (Lesson, 1828)) in a zoological collection in the Netherlands

Gerard R. Heerebout¹, Mark E.J. Bosselaers² & Jan Piet Bekker³

¹ Curator Naturalia, Koninklijk Zeeuwsch Genootschap der Wetenschappen, P.O. Box 378, NL-4330 AJ Middelburg, the Netherlands, e-mail: gerard.heerebout@gmail.com

² Curator fossil mammals, Koninklijk Zeeuwsch Genootschap der Wetenschappen

³ Curator recent mammals, Koninklijk Zeeuwsch Genootschap der Wetenschappen

Abstract: There are two jaw specimens, NHG22701 and NHG22703, of rough-toothed dolphin (*Steno bredanensis*) in the depot of the Zeeuws Museum (collection Koninklijk Zeeuwsch Genootschap der Wetenschappen). This paper describes and depicts them both. We also trace how they came to be in the collection. Specimen NHG22701, a complete skull and mandible with complete dentition of a rough-toothed dolphin, originated from the zoological collection of H. Goemans, a medical doctor in Zierikzee, the Netherlands, in the 19th century. This skull remained unnoticed in the depot of the Zeeuws Museum and it took some time to discover its identity, however its origin is still an enigma. Specimen NHG22703, a damaged mandible, was found in 1877 in a ditch near the village of Brunisse, the Netherlands. Rutten (1909) mentioned this specimen for the first time, but described it as *Delphinus* sp. Van Deirse (1946) corrected the determination, but his explanation of its origin is not convincing. De Smet's claim (1974) that the item might be the one mentioned by Cuvier (1825) and first described by van Breda (1829) also is not correct. In addition, neither specimen matches van Breda's drawing and description. We think that there is a much simpler explanation: that the jaw was from a locally caught or collected individual - and construct what we believe is a plausible explanation for it being found in a ditch.

Keywords: rough-toothed dolphin, *Steno bredanensis*, Koninklijk Zeeuwsch Genootschap der Wetenschappen, zoological collection.

Introduction

The collection of the *Koninklijk Zeeuwsch Genootschap der Wetenschappen* (KZGW, *Royal Zeeland Scientific Society*) is located in the Zeeuws Museum in Middelburg, in the province of Zeeland. It contains a mandible fragment of the rough-toothed dolphin (*Steno bredanensis* (Lesson, 1828)) that was first mentioned by van Deirse (1946). When the third author was in the museum depot

to photograph the damaged jaw (specimen NHG22703), his attention was drawn to the other, complete skull (specimen NHG22701).

The rough-toothed dolphin has a worldwide distribution in warm-temperate to tropical waters and the French coast has been mentioned as one typical location (Mead & Brownell 2005). Despite several claims for the Iberian and French Atlantic coasts for this species (Hershkovitz 1966, van den Brink 1978, Miyazaki & Perrin 1994), Maigret (1994) could not find a single, documented, observation in these waters. By contrast De Smet (1974) identifies several claims of sight-

© 2014 Zoogdierverseniging. Lutra articles also on the internet: <http://www.zoogdierverseniging.nl>

Table 1. Skull measurements (mm) of the rough-toothed dolphins (*Steno bredanensis*) in the collection of the Koninklijk Zeeuwsch Genootschap der Wetenschappen, together with the teeth counts of the specimen depicted in van Breda (1829). The measurements are according to Robineau et al. (1994). * NHG is an abbreviation of *Natuurhistorische Verzameling van het Genootschap* ** Although van Breda explicitly stated the number of teeth in both cheeks as being 46, in the drawing by D. Sluyter one can see 24 in the left upper jaw.

Specimen	NHG22701* (unknown origin)	NHG22703* (Bruinisse)	Specimen depicted by van Breda 1829
Condylbasal length	538		
Rostrum length	321		
Rostrum width	95		
Rostrum width (halfway)	50		
Postorbital width	207		
Praeorbital width	181		
Zygomaticum width	218		
Mandibulum length	455		
Upper tooth-row length	264/258		
Lower tooth-row length	276/276	280/275	
Symphysis mandibularis length	138	160	
Number of right upper teeth/alveoles	22		23
Number of left upper teeth/alveoles	22		23/24**
Number of right lower teeth/alveoles	22	22	23
Number of left lower teeth/alveoles	22	21	23

ings of this species in Belgian and Dutch waters (Eastern and Western Scheldt) by van Breda (1829); van Bemmelen (1864), Maitland (1898), Van Beneden (1889), van Oort (1918) and van Deirse (1946). Huizinga (1897) and IJsseling & Scheygrond (1950) can also be added to this list. Van den Brink (1978) states that this dolphin species was present in the Netherlands or Belgium before the year 1825. Unfortunately van Breda (1829) did not mention the date or the place of the described and depicted specimen he reported on, undoubtedly contributing to the confusion by other authors.

This paper gives a description of both of the KZGW's specimens of rough-toothed dolphin, including their museum history. It also compares these with the original description of *Delphinus bredanensis* (synonym for *Steno bredanensis*) made by van Breda (1829) including the drawings made at the time by D. Sluyter. We unravel the family and social networks of the people thought to have been

connected with these specimens. Through these two avenues we conclude that neither of these two rough-toothed dolphin skulls is the specimen mentioned by Cuvier (1825) and first described by van Breda (1829).

Specimens NHG22701 and NHG22703

The depot of the Zeeuws Museum contains an intact delphinid skull (figure 1), including the mandible (figure 2) with complete dentition but without bulla and perioticum. The standard measurements of this specimen (NHG22701) are listed in table 1. While all the upper and lower teeth are regular, alternately interlocked, on the upper left side teeth 12 and 13 are slightly compressed together and interlock together in between the slightly widened teeth 12 and 13 in the lower jaw (figure 3) (here we count the ordinal teeth numbers from the distal to the proximal). Both mandibles are



Figure 1. Skull of rough-toothed dolphin (*Steno bredanensis*) NHG22701, dorsal side. Photo: Mark Bosselaers.

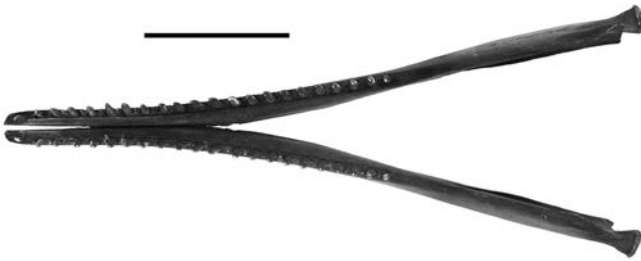


Figure 2. Mandibles of rough-toothed dolphin (*Steno bredanensis*) NHG22701. Photo: Mark Bosselaers.



Figure 3. Skull and mandible of rough-toothed dolphin (*Steno bredanensis*) NHG22701, left side. Note the irregularity in the alternating interlocking of upper and lower teeth, in upper teeth^{12,13} and lower teeth_{12,13}. Photo: Mark Bosselaers.

not fused, but they are fixed together at the symphysis, locked with two copper nails and carefully levelled with the surface of the bone. Based on the ossification of the cranial suturae the specimen is estimated to have been a sub-adult. The label for specimen NHG22701 (figure 4) reads (in translation): *Steno rostratus* / Leg. Dr. Goemans, Goes / about 1890 / inscription on lower mandible: / “Delphinus

spec.” “*D. Goemans*” / “*Beak of common dolphin*” / “*maybe D. Tursio, Bottlenose dolphin*”. It was probably Goemans who provisionally named the object *Delphinus spec.* and J.C. de Man (see below) who probably added “*Beak (?) of common dolphin*” and “*maybe D. Tursio, Bottlenose dolphin*” indicating some doubts as to its true nature. The word “*Goes*” on the label of NHG22701 (referring to the domicile

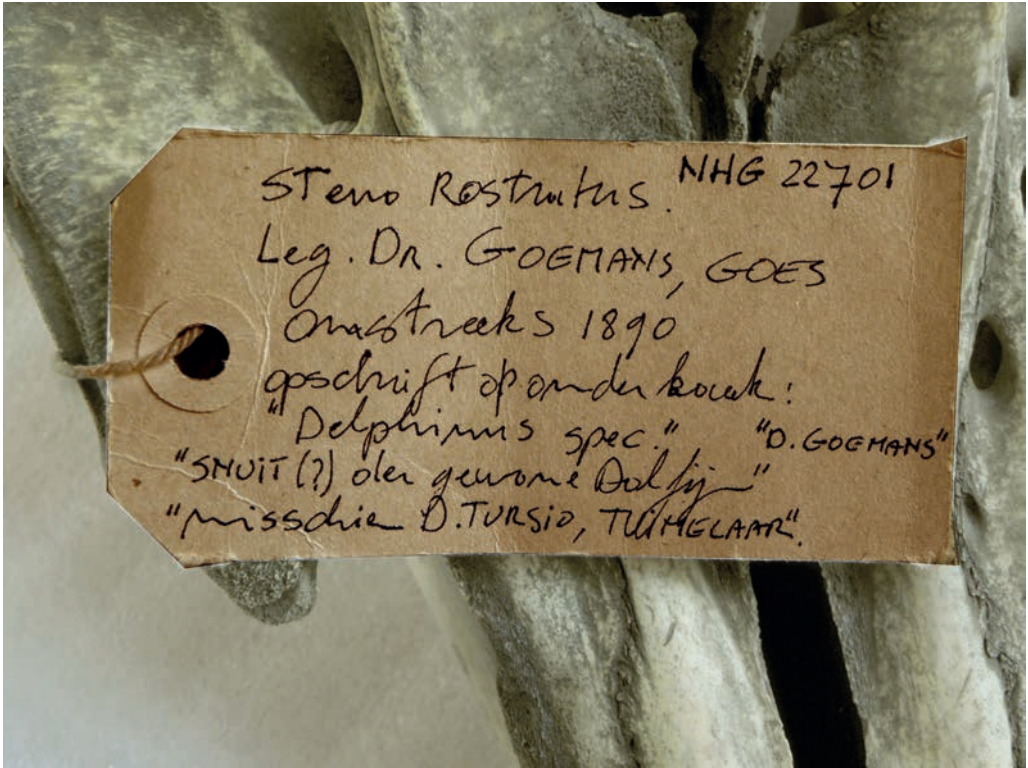


Figure 4. Label attached to the skull of rough-toothed dolphin (*Steno bredanensis*) NHG22701.
 Photo: Mark Bosselaers.



Figure 5. Extracted lower teeth 11, 12, 13, 14 and 15 (left) from rough-toothed dolphin (*Steno bredanensis*) NHG22701; mark the furrowed enamel of the teeth. Photo: Freddy Nieulande.



Figure 6. Damaged mandibles of rough-toothed dolphin (*Steno bredanensis*) NHG22703. Photo: Mark Bosselaers.



Figure 7. Label [recto (lower) et verso (upper)] attached to the mandible of rough-toothed dolphin (*Steno bredanensis*) NHG22703. Photos: Mark Bosselaers.

of Hubert Goemans) is a mistake: beyond any reasonable doubt this should to be corrected to Zierikzee (see below).

The label was attached to specimen NHG22701 in 2005 by the curator in resident, the second author of this article, describing the specimen as *Steno rostratus* (synonym for *Steno bredanensis*). As a method of conservation all the teeth and their surrounding sockets were varnished, a usual practice in the 19th century. However this layer of varnish masked the furrowed aspect of the enamel. Removing the varnish from a part of one of the teeth (using a solvent) revealed the original rough surface texture of the teeth (figure 5).

NHG22703 is the damaged distal part of the mandible (figure 6) and some of its measurements are included in table 1. The specimen has teeth numbers 8 and 15-22 present in the right mandible and teeth numbers 18-21 in the left mandible. Behind the alveole of the last tooth in the right mandible the mandible ridge is intact for ca. 3.5 cm and for ca. 6.5 cm at the left. The mandible parts are fixed together at the symphysis with three, double winded iron threads. The symphysis itself shows interlocking ossifications, indicating a full mature age. Both mandible parts display several linear marks, suggesting post mortem carving with a knife. The label NHG22703 (figure 7A: recto; 7B: verso) reads in translation: (recto:) “No 13. Damaged mandi / bles of *Steno / rostratus* Desm., / rough-toothed dolphin, / found by dred / ging of a ditch in” and (verso:) “Bruinisse, Zeeland, / before 1890. See Weber, / *Cetacea d. Siboga exp.*, / 1923. See J.E. Gray, *Cat. / Seals and whales, 1866. / Determin. A.B. van / Deinse, Rotterdam. / March 1932 [followed by the signature: A.B van Deinse.]”*

The museum history of NHG22701 and the people involved

The donor (according to the label) of specimen NHG22701, Dr. Goemans, is listed in “*Hendrik Engel’s alphabetical list of Dutch zoological*

cabinets and menageries” (Lieburg et al. 1986). Hubrecht Goemans was born on 14 March 1803, a son of a local farmer in the village of Dreischor on the island of Schouwen-Duiveland in the south-west of the Netherlands. In 1822 Goemans went to Leiden University to study medicine. In 1827 he obtained his PhD with the thesis “*De Utero*”. He returned to the island of Schouwen-Duiveland and started to practise in the town of Zierikzee. He worked there as a medical doctor for 60 years, giving up his practice at the end of 1887. Two years later, on 23 November 1889, he passed away (Anonymus 1889a). Goemans was also civically active. For many years he was a member of the town council for a liberal party. In 1845 he became a member of the learned society *Zeeuwsch Genootschap der Wetenschappen*. He also wrote some scientific papers about inoculations and was an active member of the *Geneeskundige Raad van Zeeland* (the Medical Council of the Province of Zeeland) (Anonymous 1889b). In short, he was a well-respected and highly-regarded man (Anonymous 1877).

Over the years Goemans brought together an extensive collection of natural objects, both local and from abroad. After his death his widow donated his complete collection to the *Zeeuwsch Genootschap van Wetenschappen* to be placed in its museum in Middelburg, but without providing any written documentation. J. C. de Man, curator of the museums’ natural history collection at the time, made an inventory. This handwritten list is still in the archives of the Zeeuws Genootschap, kept in the Zeeuws Archief, and mentions three specimens of small cetaceans.

His collection included several pieces of most likely local origin: a stuffed stoat (*Mustela erminea*), a stuffed polecat (*Mustela putorius*) and skulls of domestic cat (*Felis catus*), polecat and mole (*Talpa europaea*). It also included more exotic specimens: the embryo of an elk (*Alces alces*) pickled in alcohol, and the skulls of several non-European mammals: a Javanese rhinoceros (*Rhinoceros sondaicus*), a hippopotamus (*Hippopotamus amphibius*), a Sulawesi / Moluccan babirusa (*Babyrousa celebensis* /

babyroussa) and a tiger (*Panthera tigris*). There is no written record of when or how these pieces were obtained. Polman Kruseman (1894) mentioned Goemans' collection in the printed summary of the new items collected by the museum but without including the cetacean specimens.

In March 1932 the cetacean specialist van Deinse visited the museum in Middelburg (van Deinse 1946). He identified two specimens (NHG22702 and most probably NHG20010), both skulls, as being those of common dolphins (*Delphinus delphis*). The third specimen was the mandible of NHG22703, discussed below which he concluded was *Steno rostratus* (see figure 6). Van Deinse does not mention the skull and the mandible of NHG22701 so this object was probably not shown to him, perhaps because it was not stored in its proper place. Its presence was only recently discovered by the curator of the mammal fossils at the museum, the second author of this paper. As this skull stayed unnoticed in the depot of the museum and was not specified in other collection lists, its identity and presence remained completely unknown.

The museum history of NHG22703 and the people involved

There was much speculation about the origin and history of the damaged mandible of *Steno bredanensis* within the museum. It was found by a man in 1877 when he was cleaning a ditch near the village of Bruinisse (at the east end of the island of Schouwen-Duiveland). He gave it to A.C. Kamerman, a reverend in the village of Sirjansland, about five km away from Bruinisse. The rectory of Bruinisse was vacant at that time and there were no other educated men living in that small village (Jumelet 1985). He gave the mandible to the museum of the Zeeuwsch Genootschap der Wetenschappen in the same year (de Man 1879, van Deinse 1946).

J.C. de Man was the curator of the museum at the time, and the brother-in-law of the reverend A.C. Kamerman. One of the reverend A.C. Kamerman's children, P. Kamerman,

spent some time in the Congo and also presented some objects to the museum (de Man 1879). Specimen NHG22703 was mentioned in literature for the first time by Rutten (1909) although he described it as *Delphinus* sp.

Van Breda plays a role in this story because he handed drawings of an unknown dolphin species to Cuvier in Paris (Lesson 1828) (see plate I, with six figures of the exterior and plate II, with two figures of the skull in van Breda (1829)). Jacob Gijsbertus Samuël van Breda was born on 24 October 1788 in Delft. In 1811 he received his degree and became both Doctor of Medicine and Natural Sciences in Leiden. In 1816 he was appointed Professor in Franeker, teaching botany, chemistry and pharmacy. In 1822 he moved to the University of Ghent teaching botany, zoology and comparative anatomy (Breure 1979a). At the beginning of the Belgian uprising in 1830 he was forced to leave Belgium. In 1831 he received a chair at the University of Leiden in geology and in 1835 also in zoology. He ended his career in Haarlem as the Director of the Teylers Museum (Breure 1979a).

Van Breda started travelling to other European countries to meet other scientists during his studies (starting in 1810) and continued to do so regularly until 1863. In 1812 he stayed in Paris for almost a year. During that period he became acquainted with Cuvier and visited him several times. Through all these journeys he built up a network of more than 125 scientists, with whom he kept up an extensive correspondence. None of these scientists lived in the province of Zeeland, although in 1842 van Breda became a member of the Zeeuwsch Genootschap der Wetenschappen (Breure 1979a). Apart from the, already-mentioned paper on rough-toothed dolphin (van Breda 1829), Breure (1979b) mentions four other papers about cetacea by van Breda: on a stranded rorqual on 5 November 1827 at Oostende (van Breda (1827a, b, c) and later with H. Schlegel also on the rorqual (van Breda & Schlegel 1835).

Origin of both specimens: new insights and a new hypothesis

Both specimens show clearly the characteristic features (nowadays) attributed to the rough-toothed dolphin (Miyazaki & Perrin 1994): the long rostrum pressed together distally (NHG22701) the furrowed enamel of the teeth and the relatively long symphysis mandibulae (NHG22701 and NHG22703). The comparison of these two specimens with that depicted in van Breda (1829) shows a distinct difference in the number of teeth (table 1). The skull of NHG22701 also differs from the specimen depicted by van Breda, in which the foraminae premaxillare are more medially and the fossa premaxillaris is smaller and more symmetrical near the mid-axis of the skull. In addition, there are striking differences in the outline of the left squamo-parietal suturae in the two skulls.

The origin of the complete skull (NHG22701) from the collection of Goemans, which also contained a wide selection of tropical animals, remains unclear: it could have come from a distant foreign country or from a local coast. One thing is very clear: when one compares the specimen with the drawing made by van Breda (plate II, figure 2 in van Breda (1829)), it is highly unlikely that the drawing is of this skull.

In the 20th century there were two competing theories about how the damaged mandible (specimen NHG22703) came to be in the KZGW collection. As mentioned earlier, van Deinse identified NHG22703 to be *Steno rostratus*. He compared the degree of discolouration of the mandible with bones of a *Mesopiodon*, buried for just 26 years in wet clay and concluded it was highly unlikely that the mandible had been buried in the Bruinisse-polder since its was reclaimed from the sea (more than 400 years ago). He judged the object to be rather more recent and suggested that P. Kamerman had maybe brought it with him from the Congo and had lost (or discarded) it near Bruinisse (van Deinse 1946) where it was found again and given to his father.

The Belgian cetologist De Smet (1974) also tried to explain how the mandible could have ended up in a ditch near Bruinisse. He thought it possible that van Breda might have taken the skeleton (or a part of it) of the *Steno bredanensis* (named after him) with him when he fled from Ghent during the Belgian uprising (1830). He might have travelled to Zierikzee “vermits hij afkomstig was van Zierikzee” (“because he originated from Zierikzee”) (De Smet 1974). However this is a supposition and not backed up by any documentary evidence. Breure’s biography of van Breda (1979a) does not mention his origins from Zierikzee and a search of the Provincial Archives in Middelburg shows that nobody with his family-name (or that of his wife, Camper) was living in Zierikzee at the time (Zeeuws Archief 2014).

There is a more plausible explanation as why a broken jaw with cutting marks was found in a ditch near Bruinisse. Between 1822 and 1855 the Dutch government paid a bounty for every seal or harbour porpoise caught (to help support the local fisheries) The bounty was paid by a local official, in this region a member of the Fishery Board for the South West Netherlands (Bestuur der Visserijen op de Zeeuwse Stromen) (Zuurdeeg 1974). When a fisherman presented a killed seal or a harbour porpoise, the jaw was hewn off, as this was an easily-handled and recognisable piece of the animal that could be used to claim the bounty (of two guilders). The fisherman was allowed to keep the jaw-less animal. Other dolphins, also being seen as fish predators, were probably treated the same way.

C. van de Stolpe was the burgomaster of Bruinisse (from 1811 till 1861) and was responsible for paying the bounty in that period. He was a farmer who lived about five km from the village, where the harbour and the small municipal office were situated. We suppose that most animals were shown to him at the harbour where the jaws were hewn off and discarded. Probably only exceptionally were the jaws of animals transported to his farm; and in this case the hewn-off jaw may have ended

up in the closest ditch. As such the damaged jaw found in 1877 could have originated from a locally killed or found rough-toothed dolphin.

We have now gone some way to explaining the origins of the two specimens in the KZWG collection. It is now clear that neither can be the specimen that van Breda (1829) described and depicted. A search in natural history museums in nearby countries is recommended in order to identify the latter specimen.

Acknowledgements: We would like to thank Freddy van Nieulande for cleaning the varnished teeth of specimen NHG22701 and Wim Bergmans for supplying information on curators' handwriting. We acknowledge support provided by Chris Smeenk for his help in searching for special literature. We also thank Mrs. Kathie Barrett and Nick Parrott, both native English speakers, for improving the English language. We are grateful to the Zeeuws Museum, Middelburg, the Netherlands, for permission to study these skulls in their depot. Finally we thank two anonymous reviewers and the editors of *Lutra* for their useful comments on the first draft of the manuscript.

References

- Anonymus [= J.G.S. van Breda & H. Schlegel] 1835. Rorqual op onze kusten. *Algemeene Konst- en Letterbode* (43): 235-236.
- Anonymus 1877. *Zierikzeesche Nieuwsbode* 6-11-1877: 1.
- Anonymus 1889a. Overlijdens bericht. 14 Maart 1803-23 Nov. 1889. *Zierikzeesche Nieuwsbode* 31-12-1889: 1.
- Anonymus 1889b. In Memoriam. Dr. Hubrecht Goemans. 14 Maart 1803-23 Nov. 1889. *Zierikzeesche Nieuwsbode* 31-12-1889: 1.
- Breure, A.H.S. 1979a. Biografie. In: A.H.S. Breure & J.G. de Bruijn (red.). *Leven en werk van J.G.S. van Breda (1788-1867)*: 13-30. *Hollandsche Maatschappij der Wetenschappen, Haarlem / Tjeenk Willink, Groningen, the Netherlands*.
- Breure, A.H.S. 1979b. Bibliografie. In: A.H.S. Breure & J.G. de Bruijn (red.). *Leven en werk van J.G.S. van Breda (1788-1867)*: 31-37. *Hollandsche Maatschappij der Wetenschappen, Haarlem / Tjeenk Willink, Groningen, the Netherlands*.
- Cuvier, G. 1825. *Recherches sur les ossemens fossiles, où l'on rétablit les caractères de plusieurs animaux dont les révolutions du globe ont détruit les espèces*. Nouvelle édition, entièrement refondue, et considérablement augmentée. Tome cinquième. Ire. partie, contenant les rongeurs, les édentés, et les mammifères marins. G. Dufour & E. d'Ocagne, Paris, France / Amsterdam, the Netherlands.
- De Smet, W.M.A. 1974. Inventaris van de walvisachtigen (Cetacea) van de Vlaamse kust en de Schelde. *Bulletin van het Koninklijk Belgisch Instituut voor Natuurwetenschappen, Biologie* 50 (1): 1-156.
- de Man, J.C. 1879. Naamlijst van voorwerpen van zoölogischen aard alsmede van anthropologische en pathologische voorwerpen, toebehorende aan het Zeeuwsch Genootschap der Wetenschappen. J.C. & W. Altorffer, Middelburg, the Netherlands.
- Hershkovitz, P. 1966. Catalog of living whales. *Smithsonian Institution Bulletin* 246: 1-259.
- Huizinga, S.P. [1897]. *Het leven der dieren door A.E. Brehm. Naar den tweeden druk der volksuitgaaf voor Nederland bewerkt. Eerste deel. De zoogdieren*. Schillemans en Van Belkum, Zutphen, the Netherlands.
- Ijsseling, M.A. & A. Scheygrond 1950. *De zoogdieren van Nederland*. W.J. Thieme, Zutphen, the Netherlands.
- Jumelet, S.A. 1985. *Bruinisse in de loop der eeuwen 1467-1984*. Culturele Stichting Bruinisse, Bruinisse, the Netherlands.
- Lesson, R.P. 1828. *Histoire naturelle générale et particulière des mammifères et des oiseaux découverts depuis 1788 jusqu'à nos jours*. Cétacés. Baudoin Frères, Paris, France.
- Lieburg, M.J., G.A. Lindeboom & H.A.M. Snelders 1986 (eds.). *Hendrik Engel's alphabetical list of Dutch zoological cabinets and menageries*. *Nieuwe Nederlandse bijdragen tot de geschiedenis der geneeskunde en der natuurwetenschappen* 19. Rodopi B.V., Amsterdam, the Netherlands.
- Maigret 1994. *Steno bredanensis* (Lesson, 1828) – *Rauhzahndelphin* (auch *Langschnauzendelphin*). In: J. Niethammer & F. Krapp (eds.). *Handbuch der Säugetiere Europas, Band 6: Meeressäuger, Teil I: Wale und Delphine* 1: 269-280. Aula-Verlag, Wiesbaden, Germany.
- Maitland, R.T. 1898. *Notices sur les animaux rares*

- des Pays-Bas et de la Belgique flamande (Mammifères.). Martinus Nijhoff, La Haye, the Netherlands.
- Mead, J.G. & R.L. Brownell 2005. Order Cetacea. In: D.E. Wilson & D-A.M. Reeder, Mammal Species of the world, a taxonomic and geographic reference. Volume 1: 723-739. The John Hopkins University Press, Baltimore, U.S.A.
- Miyazaki, N. & W.F. Perrin 1994. Rough-toothed dolphin *Steno bredanensis* (Lesson, 1828). In: S.H. Ridgeway & R. Harrison (eds.). Handbook of marine mammals volume 5: 1-21. Academic Press Limited Press, London, UK.
- Polman Kruseman, W. 1894. Verslag van de geschiedenis van het Genootschap over het tijdvak April 1884 tot April 1893. In: Zeeuwsch Genootschap der Wetenschappen. Verslag over 1885-1893. Benevens naamlijst van directeuren en leden. Met eene dubbele titelplaat: 41-125. J.C. & W. Altorffer, Middelburg, the Netherlands.
- Robineau, D., R. Duguay & M. Klima 1994. A. Einführung. In: J. Niethammer & F. Krapp (eds.). Handbuch der Säugetiere Europas, Band 6, Meeressäuger, Teil I: Wale und Delphine 1: 11-25. Aula-Verlag, Wiesbaden, Germany.
- Rutten, L.M.R. 1909. Die diluvialen Säugetiere der Niederlande. PhD thesis. Rijksuniversiteit Utrecht, Utrecht, the Netherlands.
- van Bemmelen, A.A. 1864. Lijst der zoogdieren, tot heden in den wilden staat in Nederland waargenomen. Bouwstoffen voor eene Fauna van Nederland 3: 514-532.
- Van Beneden, P.J. 1889. Histoire naturelle des Delphinides des mers d'Europe. Memoires du Course de l'Academie Royal Belge 43: 1-253.
- van Breda, J.G.S. 1827a. Eenige bijzonderheden omtrent den Walvisch die den 5den November 1827 bij Oostende gestrand is. Algemeene Konst- en Letterbode (48): 341-349.
- van Breda, J.G.S. 1827b. Eenige bijzonderheden omtrent den Walvisch die den 5den November 1827 bij Oostende gestrand is. Algemeene Konst- en Letterbode (50): 381-382.
- van Breda, J.G.S. 1827c. [Translation of summary]. Bulletin Scientia Nature 15: 298.
- van Breda, J.G.S. 1829. Aanteekening omtrent eene nieuwe soort van dolfijn. Nieuwe Verhandelingen, 1^{ste} Klasse, Koninklijk Nederlandsch Instituut II: 235-237.
- van Deirse, A.B. 1946. De recente Cetacea van Nederland van 1931 tot en met 1944. Zoologische Mededeelingen 26: 139-210.
- van den Brink, F.H. 1978. Zoogdierengids van alle in ons land en overig Europa voorkomende zoogdieren. Elsevier, Amsterdam, the Netherlands.
- van Oort, E.D. 1918. Over een te Noordwijk aan zee aangespoelden *Lagenorhynchus albirostris*, benevens een lijst van de cetaceëen-soorten, die tot heden aan de Nederlandsche kust zijn waargenomen. Zoologische mededelingen Leiden 4: 54-62.
- Zeeuws Archief 2014. Zeeuwen Gezocht, keyword Camper, URL: www.zeeuwsarchief.nl/zoeken/?q=camper&tab=people; viewed October 2014.
- Zuurdeeg, J.P.B. 1974. Inventaris van de archieven van het Bestuur der Visserijen op de Zeeuwse stromen 1825-1869. Zeeuws Archief, toegang 17.1: 840.

Samenvatting

Over twee specimens van de snavel-dolfijn (*Steno bredanensis* (Lesson, 1828)) in een zoölogische collectie in (zuidelijk) Nederland

In het depot van het Zeeuws Museum (collectie Koninklijk Zeeuws Genootschap der Wetenschappen) te Middelburg zijn twee specimens van de snavel-dolfijn (*Steno bredanensis*) aanwezig. Deze beide specimens worden hier beschreven en ook afgebeeld. De aanwezigheid in het depot van specimen NHG22701, een gave schedel met onderkaak en complete dentitie, was tot nu toe niet bekend, want niet voorkomend in inventarislijsten van het Museum. De vindplaats van deze schedel, afkomstig uit de collectie Goemans, is een raadsel. Het tweede specimen NHG22703, in 1877 gevonden in een sloot bij Bruinisse, bestaat uit een gedeelte van een onderkaak. Van Deirse (1946) determineerde deze kaak als *Steno rostratus* (synoniem voor *Steno bredanensis*), maar zijn suggestie voor

de mogelijke herkomst houdt geen stand, net zomin als die van De Smet (1974). Wij achten het aannemelijk dat de kaak van een lokaal gevangen of verzameld exemplaar afkomstig is. Beide specimens komen niet overeen met het exemplaar waarvan Van Breda (1829) een

tekening liet maken en een beschrijving gaf en die diende als beschrijving voor de soort, het type-exemplaar.

Received: 10 July 2014

Accepted: 23 September 2014