
Addendum to the revised catalogue of cetaceans (Cetacea) in collections in the Czech Republic

Doplňk k revidovanému katalogu kytovců (Cetacea) ve sbírkách v České republice

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Abstract. An addendum to the previously published list of cetacean specimens in several Czech collections (ROBOVSKÝ & BENDA 2006) is given, based on a detailed survey across a large number of institutions (museums, castles, churches, etc.). In the collection of National Museum Praha (NMP), we found additional skulls of *Delphinapterus leucas*, *Globicephala melas*, *Monodon monoceros* and *Orcinus orca*; we also identified taxonomic status of two NMP specimens inaccurately mentioned in the previous paper, *Inia geoffrensis geoffrensis* (skull) and *Platanista gangetica* s. str. (skeleton). Additional cetacean specimens were found and documented in some smaller collections. The most significant identified items include a skull of *Platanista gangetica* s. str. and two isolated teeth of *Physeter catodon* from the Municipal Museum in Čáslav, a skull of *Pontoporia blainvillei* from the Zoological Museum in Protivín, two isolated auditory bullae of a large whale from the Museum of Eastern Bohemia, Hradec Králové, and two hemimandibles of *Balaena mysticetus* from the Lednice State Castle, Lednice na Moravě.

Key words. Catalogue, Cetacea, whales and dolphins, museum collections.

INTRODUCTION

Three years ago, we compiled and published a catalogue of all cetaceans found in several collections in the Czech Republic (ROBOVSKÝ & BENDA 2006). Since that, we have found several overlooked specimens in the zoological collection of the National Museum Praha. To complement the addendum to the published catalogue, all Czech institutions which might store zoological collections were addressed. We obtained new information concerning additional

cetacean specimens deposited in collections scattered throughout the country. Here we present a probably almost complete list of cetacean items deposited in various collections in the Czech Republic which were not mentioned in the first part of the revised catalogue (ROBOVSKÝ & BENDA 2006).

MATERIAL AND METHODS

We attempted to identify all collection specimens; the material was identified or re-determined by the first author (JR) according to the following published sources: VAN BREE & PURVES (1972), PILLERI & GIHR (1971, 1976a, b, 1977a, b, 1982), VAN BREE & GALLAGHER (1978), RIDGWAY & HARRISON (1989a, b, 1994, 1999), ROBINEAU et al. (1994, 1995) and REEVES et al. (2002). Skull measurements were taken in a standard way according to ROBINEAU et al. (1994, 1995). Inaccurate identifications are marked with “cf.”. Unless specified, measurements are given in millimetres. Approximate data (\approx) are given when the specimens could not be measured exactly due to their preservation and/or inaccessibility or when they were damaged. The taxonomic order follows that by MEAD & BROWNELL (2005).

ABBREVIATIONS

MEASUREMENTS. BL – baleen length; CB – circumference of sperm whale tooth at the base; CBL – condylobasal length; DB – diameter of the base of baleen or sperm whale tooth; DM – diameter of the middle portion of baleen; GC – greatest circumference of narwhal tusk or sperm whale tooth; GD – greatest diameter of narwhal tusk or sperm whale tooth; ML – mandible length; MH – coronoid height of mandible; NTL – narwhal tusk length; PL – penial length; RL – rostrum length; RW – rostrum width at base; ZW – zygomatic width of skull; im. – the respective measurement could not be taken.

DATA ON SPECIMENS. AN – accession number; ATNU – alveoli and teeth number in upper jaw; ATNL – alveoli and teeth number in lower jaw; ATNUL – alveoli and teeth number in left upper jaw; ATNUR – alveoli and teeth number in right upper jaw; ATNLL – alveoli and teeth number in left lower jaw; ATNLR – alveoli and teeth number in right lower jaw; N – note; n – number; O – geographical and/or temporal origin; OD – original description or note (other than the inventory number); ATNUL, ATNUR, ATNLL, and ATNLR are mentioned where different values for the objects from left and right body side were obtained.

CATALOGUE

National Museum, Praha

Delphinidae

Globicephala melas (Traill, 1809)

NMP 92564; skull without mandibles and hyoid bones. O: unknown; OD: absent. CBL=690; ZL=522; RL=353; RW=290; ATNUL \approx 10. N: right alveoli number indeterminable because of a partial rostrum rupture. Lack of data on the geographic origin does not allow a precise subspecies determination.

Orcinus orca (Linnaeus, 1758)

NMP 92565; skull without hyoid bones. O: unknown; OD: absent. CBL=im.; ZL \approx 472; RL=420; RW=215; ML (left) \approx 646, MH \approx 166; ATNUL=12, ATNUR=13, ATNL=13. N: the basal part of the occipital region including the condyles is cut away, mandibles and many teeth are cracked, angular portions of mandibles are broken.

Monodontidae

***Delphinapterus leucas* Lacépède, 1804**

NMP 92566; skull without hyoid bones. O: unknown; OD: absent. CBL=547; ZL=276; RL=269; RW=170; ML (left)≈410, MH≈121; ATNU=9, ATNL=9. N: mandibles are cracked, angular portions of mandibles are broken, both hemimandibles are artificially reinforced at the outer part of symphysis by iron staples. Two auditory bullae are present, but extracted from the skull.

***Monodon monoceros* Linnaeus, 1758**

NMP 92567; skull without mandible and hyoid bones. O: unknown; OD: absent. CBL=571; ZL=345; RL=260; RW=227. N: braincase is cracked, partly artificially reinforced on its dorso-caudal side by iron staples. The tusk is absent, but a large size of the left alveolus indicates male sex of the specimen.

Identification of river dolphin specimens in the NMP

With a help of new data available, we were able to revise taxonomic status of two specimens of river dolphins identified inaccurately in the previous part of the catalogue (ROBOVSKÝ & BENDA 2006).

The status of two taxa – species or subspecies – of the genus *Platanista* Wagler, 1830. (*P. gangetica* (Roxburgh, 1801), *P. minor* Owen, 1853) is a controversial topic in the cetacean taxonomy. Several authors argued for their subspecific status under *P. gangetica*; e.g. KASUYA (1972) based on the growth pattern, and HAMILTON et al. (2001) and YANG et al. (2002) based on very slight differences in the mitochondrial genome sequences. On the other hand, PILLERI & GIHR (1971, 1976a, b, 1977a, 1982) enumerated several diagnostic characters and advocated their specific status. The latter arrangement was accepted e.g. by MEAD & BROWNELL (2005). We originally identified a specimen from the collection of the National Museum Praha as *Platanista gangetica* s. str. (NMP 9865) *sensu* MEAD & BROWNELL (2005). Based on the data from additional studies (PILLERI & GIHR l.c.), we found morphological support for the previous identification. A marked sexual dimorphism is documented in the Ganges and Indus river dolphins (see PILLERI & GIHR 1971 for details) – the respective specimen seems to be a male.

Similarly, the taxonomy of the genus *Inia* d'Orbigny, 1834 is somewhat controversial. PILLERI et al. (1977b, 1982) suggested existence of distinct taxa within the Amazon river dolphin – two species, *I. geoffrensis* (Blainville, 1817) and *Inia boliviensis* d'Orbigny, 1834. Moreover, they distinguished two subspecies within *I. geoffrensis*; *I. geoffrensis geoffrensis* and *I. g. humboldtiana* Pilleri et Gühr, 1978. Recently, *Inia boliviensis* has been considered a subspecies of *I. geoffrensis* (REEVES et al. 2002, MEAD & BROWNELL 2005). Currently, three subspecies of the Amazon river dolphin (*Inia geoffrensis*) are distinguished; one for the Orinoco Basin (*I. g. humboldtiana*), one for the main part of the Amazon Basin (*I. g. geoffrensis*), and one for the upper Madeira river system between Pôrto Velho and Guajará-Mirim (*I. g. boliviensis*) (REEVES et al. 2002). However, the original arrangement by PILLERI et al. (1977b, 1982) has been recently well supported by the results of two genetic analyses (BANGUERA-HINESTROZA et al. 2002, MAY-COLLADO & AGNARSSON 2006). The genetic differences and some morphological diagnostic characters seem to legitimate a species status of *Inia boliviensis*. Originally, we were not able to provide an accurate taxonomic affiliation, however, we identified the specimen NMP 91007 as *Inia geoffrensis geoffrensis* (PILLERI et al. 1977b).

Municipal Museum and Library, Čáslav

Balaenopteridae

cf. *Balaenoptera musculus* (Linnaeus, 1758)

[MMLČ] **ZOO-591**: one baleen. O: donated by Josef KAUNICKÝ, 18 May 1892. OD: “AN 7425/85”; “Horny baleen. Caption on the evidence card: Black baleen of triangular shape, longitudinally crooked to an arc; length 85 cm (measured without free fringed parts)” [translated from Czech]. BL=850; DB≈320; DM=280. N: black colour. We tend to identify this baleen as of *B. musculus* based on its coloration, shape and size.

Balaenopteridae Gray, 1864 sp.

[MMLČ] **unnumbered**: a small baleen fragment. O: donated by Josef KAUNICKÝ. OD: absent. BL≈135; DB≈35; DM≈33. N: dark beige colour with two narrow vertical dark bands. The base and width are modified by cutting. The baleen may belong to *Balaenoptera acutorostrata* or *B. physalus*, but its modification does not allow accurate identification.

Delphinidae

cf. *Delphinus delphis* Linnaeus, 1758

[MMLČ] **ZOO-866**: skull without hyoid bones. O: donated by Josef KAUNICKÝ, 18 May 1892. OD: “Caption from the evidence card: Skull, measurements: condylobasal length 318 mm, zygomatic width 143 mm; tooth number: maxillae – 50 on the right side, 46 left side, 2 broken, 2 missing; mandibles – right 47, left 46, 1 missing. Identified by Dr. Ivan Heráň CSc., National Museum, 1976” [translated from Czech]. CBL=318; ZL=143; RL=165; RW=70.6; ML=261.8 (left) / 264.9 (right). N: ATNU=50; ATNL=47. The skull differences mentioned by VAN BREE & PURVES (1972) and VAN BREE & GALLAGHER (1978) could imply identification of the specimen as *Delphinus delphis*, but not *Delphinus capensis* or *D. tropicalis*. Considering its smaller dimensions, the specimen probably comes from a young individual (cf. WESTGATE 2007).

cf. *Stenella clymene* (Gray, 1846)

[MMLČ] **ZOO-865**: isolated rostrum with both mandibles. O: donated by Josef KAUNICKÝ, 18 May 1892. OD: “Unspecified species of dolphin. Caption from the evidence card: Upper jaws are not complete, basal part is missing, it was artificially separated, length 22.5 cm; right mandible complete, its length is 35.5 cm, basal part of the left mandible is broken, length 29.5 cm. Identified by A. Kůrka, 1972” [translated from Czech]. RL≈225; RB≈60.7; ML≈355; MH≈65.3; ATNUL=45; ATNUP=41; ATNUL=44; ATNUP=45–46. N: rostrum is cut away. Right angular process is partly broken, the proximal part of the left mandible is completely broken. We identified this specimen as a member of the genus *Stenella*. The shape of rostrum, mandible and mandibular symphysis and the size and number of teeth seem to correspond mostly to *Stenella clymene* (RIDGWAY & HARRISON 1994), but we are limited in the identification by the fragmentary character of this specimen.

Monodontidae

***Monodon monoceros* Linnaeus, 1758**

[MMLČ] **ZOO-884**: long tusk. O: donated by Josef KAUNICKÝ, 18 May 1892. OD: “osteological preparation. Narwhal. Caption from the evidence card: tooth – length 187 cm, greatest width 62 mm; one small drilled opening 11 mm in diameter at the basis. Specimen composed of six parts. Identified by Dr. A. Kůrka, 1972.” [translated from Czech]. NTL=1850; GC=185; threads number 7. N: tusk is broken into six segments, but pieced together. One small circular opening at the base of the tusk.

[MMLČ] **unnumbered**: shorter tusk. O: donated by Josef KAUNICKÝ. OD: “Khifos Kus, 250 g”. NTL=660; GC=72; threads number 5. N: the basal part of the tusk is broken.

Platanistidae

cf. *Platanista gangetica* (Roxburgh, 1801)

[MMLČ] **ZOO-864**: skull without hyoid bones (Fig. 1). O: donated by Josef KAUNICKÝ, 18 May 1892. OD: “Ganges river dolphin (*Susu gangetica* (Phipps, 1774). Caption from the evidence card: Skull – the specimen was once badly damaged by pests. Measurements: maximum length 266 mm, teeth in the posterior parts of the jaws are missing. Note: the specimen bears the following data: ‘river dolphin [plískavice rýčna], Japan’. Identified by Dr. Ivan Heráň, CSc., National Museum, 1976.” [translated from Czech]. RL=185; RB=18.54; ML=248.73 (left) / 248.49 (right); MH=39.05 / 39.16; length of symphysis 160.94;

greatest breadth across both maxillary crests 98.22; ATNU \approx 18–20; ATNL \approx 23–25. N: caudal part of the braincase is broken behind the caudal margin of frontalia and missing. Several teeth/alveoli are evidently absent in the rear part of upper and lower jaw rows, but their number is not determinable. The anterior half of rostrum and large parts of the mandibles are covered by skin. Based on the skull differences between the two species of the genus *Platanista* noted by PILLERI & GIHR (1971), we tend to identify this specimen as *Platanista gangetica*. Without any additional information about its exact geographical origin (obviously erroneous in the specimen) and without the possibility to verify this diagnosis with a help of some infallible postcranial characters (e.g., cervical vertebrae, see PILLERI & GIHR 1976a), we consider this diagnosis only tentative. Regarding the marked sexual dimorphism in the Ganges and Indus river dolphins (PILLERI & GIHR 1971), we identify the specimen as a male. The specimen ranks among the most valuable cetacean material in the Czech Republic.

Physeteridae

***Physeter catodon* Linnaeus, 1758**

[MMLČ] ZOO-889/1, 2: two isolated teeth. O: donated by Josef KAUNICKÝ. OD: “tusks of a wild boar babirusa, India; AN 7643/85; two teeth”. Direct and outer / inner outline lengths 150, 160 / 150 (ZOO-889/1) and 155, 165 / 155 (ZOO-889/2); CB=150; 153; GC=180; 181; DB=59; 60; GD=60.4; 62. N: two small openings at the teeth bases.

Museum of Eastern Bohemia, Hradec Králové

Balaenopteridae

cf. Balaenopteridae Gray, 1864

[MEB] 38410, 38411: two auditory bullae. O: unknown; OD: absent. Length 121.56 and 121.96; greatest height 78.24 and 78.43; height across the bullae: 66.24–75.72–76.32 and 64.89–78.66–76.63. N: both bullae were originally stored in a collection of shells and they came from two different individuals (from the same skull side). Sigmoid processes and posterior processes of the ectotympanic bulla (cf. LUO 1998)



Fig. 1. Skull of cf. *Platanista gangetica* ZOO-864 from the Municipal Museum and Library, Čáslav.
Obr. 1. Lebka delfinovce cf. *Platanista gangetica* ZOO-864 z Městského musea a knihovny Čáslav.

were broken/cut off, perhaps to make them more similar to shells. The lengths are identical to the length of one bulla of *Balaenoptera physalus* published in the previous catalogue version (ROBOVSKÝ & BENDA 2006). We compared the bullae with those of *Balaenoptera physalus* from the National Museum collection (NMP 9855) and observed size and shape similarities. They certainly came from a relatively large cetacean, but an accurate identification is currently not possible.

Delphinidae

***Delphinus delphis* Linnaeus, 1758**

[MEB] 29137: skull without hyoid bones. O: unknown; OD: “*Delphinus delphis*, AN A144”. CBL=477; ZL=195; RL=301; RW=85.4; ML=399; MH=71; ATNUL≈40; ANTUR≈48; ATNLL=49; ATNLR=48. N: skull is mounted with mandibles. The number of upper teeth/alveoli is smaller than usual; several teeth/alveoli are evidently absent in the upper jaw rows, but their number is not determinable. Based on skull differences emphasised by VAN BREE & PURVES (1972) and VAN BREE & GALLAGHER (1978), we identify the specimen as *Delphinus delphis* (*D. capensis* or *D. tropicalis* are less probable). The similarity of skull dimensions with the mean values of the ratios between zygomatic width and rostral length against condylobasal length published by WESTGATE (2007) suggest a close position of the specimen to Peruvian samples of *Delphinus capensis* published by this author, but the absolute values do not reject the diagnosis as *Delphinus delphis*. If we accept the identification of this specimen as *Delphinus delphis*, the skull probably belongs to a male due to its larger size (see WESTGATE 2007).

Zoological Museum, Protivín

Delphinidae

***Delphinus delphis* Linnaeus, 1758**

[ZMP] unnumbered: skull without hyoid bones. O: unknown; OD: “*Delphinus*, A.41; 394(?)”. CBL=im.; ZL=159; RL=214; RW=78; ML=360; MH≈54; ATNUL=46; ANTUR=45; ATNLL=44; ATNLR=46. N: occipital condyles cut away. Based on skull differences mentioned by VAN BREE & PURVES (1972) and VAN BREE & GALLAGHER (1978), we identify the specimen as *Delphinus delphis* (*D. capensis* or *D. tropicalis* are less probable).

Phocoenidae

***Phocoena phocoena* (Linnaeus, 1758)**

[ZMP] unnumbered: skull without mandible and hyoid bones. O: unknown; OD: 531. CBL=246; ZL=144; RL=111; RW=69; ML=187; MH=51; ATNUL=19; ATNUR=16–18; ATNL=17. N: the vomer exposition corresponds to *P. vomerina* sensu HALL & KELSON (1959).

Iniidae Gray, 1846

***Pontoporia blainvillei* (Gervais et d’Orbigny, 1844)**

[ZMP] unnumbered: skull without hyoid bones. O: unknown; OD: absent. CBL=282.4; ZL=103.4; RL=184; RW=38; ML=243; MH=44.4; ATNUL≈42; ATNUR≈44; ATNLL=46; ATNLR=48. N: several teeth are absent in the rear part of the tooth rows, but their number is not determinable.

Other institutions

Balaenopteridae

cf. *Balaena mysticetus* Linnaeus, 1758

Lednice State Castle (Lednice na Moravě): pair of hemimandibles (Fig. 2). O: unknown; OD: “Brukner, 1848; 18/4”. Greatest “straight” length 4640 (left) and 4600 (right); length along the inner curvature 4810

and 4750; length along the outer curvature 4900 and 4950; height in the apical/middle part of mandible body/condyle region 190/290/500 (left) and 215/260/410 (right); greatest diameter of the condyle 280 and 260. N: the surface of both hemimandibles is somewhat bleached, probably due to the former exposition to open weather conditions. Two artificial circular openings are present at the base, in the middle portion, and one at the apex in both hemimandibles, probably due to the former fixed installation. The specimen is certainly a member of the Balaenidae family (MAZÁK & HONCŮ 1983), and we tend to identify the specimen as *Balaena mysticetus*, based on the data by MAZÁK & HONCŮ (l.c.) and other sources including our photographic evidence. As reviewed by MAZÁK & HONCŮ (1983) for *Balaena mysticetus*, the “straight” mandible length represents about 31 to 33% of the total length of the animal measured in flesh. The Lednice specimen seems to originate from an animal whose total body length was about 14–15 m, suggesting a relatively small age/small size of the individual.

cf. *Balaenoptera physalus* (Linnaeus, 1758)

Česká Grammar School (České Budějovice): one baleen. O: unknown; OD: “PBfM, 6Č 151”. BL≈735; DB=310; DM=325. N: colour dark grey-black. We tend to identify this baleen as *Balaenoptera physalus* based on its coloration, shape and size.

Monodontidae

***Monodon monoceros* Linnaeus, 1758**

Častolovice Castle (Častolovice): relatively medium-sized tusk. O: unknown; OD: absent. NTL≈1340; GC=210; threads number ≈5. N: the apex and part of the middle portion are broken.

Czech Museum of the Silver (Kutná Hora): complete tusk. N: threads number 8.

National Museum, Historical Museum (Praha): a stick from the narwhal tusk. N: deposited in the collection of the Museum of Mathematics, Klementinum Palace, Praha, founded in 1722 (PETRÁŇ 1999).

Museum of South-Eastern Moravia (Zlín): long tusk. O: unknown; OD: collection number ZM 4282221/01; AN I/80. NTL≈2690; GC = 200; threads number 11. N: deposited in the Malenovice Castle; the tusk was originally deposited in the collection of the Count of DESFOURS-WALDERODE in the Poštát Castle. His collection was purchased by the Baťa Company in 1938 and after 1945, it became a part of the collection of the Museum of South-Eastern Moravia. The tusk was obtained in ca. 1900–1910(?),



Fig. 2. Heminandibles of cf. *Balaena mysticetus* from the Lednice State Castle.

Obr. 2. Spodní čelisti zřejmě velryby grónské (*Balaena mysticetus*) ze Státního zámku Lednice.



Fig. 3. Tusk of *Monodon monoceros* mounted as a unicorn trophy in the Lednice State Castle (all photos by J. ROBOVSKÝ).

Obr. 3. Zub narvala (*Monodon monoceros*) instalován jako trofej jednorožce ve Státním zámku Lednice (všechny fotografie J. ROBOVSKÉHO).

prepared by HOFFMANN. This tusk seems to be the longest narwhal tusk documented in collections of the Czech Republic. The apex is cracked.

Czech Pharmaceutical Museum, Kuks Hospital (Kuks): long unbroken tusk. O: unknown; OD: absent. NTL=2210; GC=140; threads number 10. N: tusk is embedded in a wooden horse head and the specimen represents a mythical figure of unicorn. It is mounted as a part of original equipment of a baroque pharmacy coming from the first half of the 18th century.

North Bohemian Museum (Liberec): relatively long unbroken tusk. O: unknown; OD: absent. NTL=1530; GC=150; threads number 8. N: the apex is broken.

Muzeum Vysočiny [= Třebíč Regional Museum] (Třebíč): medium-sized tusk. O: unknown; OD: absent. NTL≈1200. N: originally stored in the historical collection as a stick.

Buchlov State Castle (Buchlov): two complete tusks. O: unknown; OD: inventory number 1921/900. NTL=1730 and 2400; threads number 6 and 8–9. N: The shorter tusk is cut away at the apex. The longer tusk seems to be the second longest narwhal tusk documented in collection of the Czech Republic. Both tusks come from the collection of the last castle owners, the brothers Leopold I. and Bedřich Všemír BERCHTOLDS, which was accumulated in the first half of the 19th century.

Lednice State Castle (Lednice na Moravě): long unbroken tusk (Fig. 3). O: unknown; OD: absent. NTL=1875; GC=175; threads number ≈8. N: tusk is embedded in a wooden head of a unicorn; the head resembles a horse with amygdaloid eyes, but with a goat beard. This tusk originates from the collection by the family of LIECHTENSTEIN.

Žleby Castle (Žleby): complete long tusk. N: collection of the former castle owner, Count C. AUERSPERG, who was an admirer of the English romanticism. The tusk is exhibited in the entry hall and was perhaps installed among the historical medieval arms because the unicorn horn was considered the symbol of victory and success.

Strahov Monastery, Royal Canonry of Premonstratensians at Strahov (Praha): long unbroken tusk. O: unknown; OD: absent; NTL=1800; threads number 6. N: the tusk is exhibited in the “Cabinet of Curiosities”, probably coming from the collection of the Baron Karel Jan EBEN (Brno) from the end of the 18th century (KNEIDL 1989).

White Unicorn Baroque Pharmacy, Doctor Hostaš Regional Museum (Klatovy): complete tusk. N: there is an original pharmacy equipment from the first half of the 18th century.

Phocoenidae

***Phocoena phocoena* (Linnaeus, 1758)**

Department of Zoology, University of South Bohemia (České Budějovice): skull without mandible and hyoid bones. O: Black Sea shore near Sulina (45° 10' N, 29° 42' E), Romania, coll. by Václav MIKEŠ in September 2003. CBL=220.8; ZL≈127; RL=99.5; RW=63.3. OD: absent. N: the vomer exposition corresponds with *P. vomerina* sensu HALL & KELSON (1959). This skull lacks teeth or fully determinable alveoli. Václav MIKEŠ (ad verb.) observed five other dead individuals at this locality.

Cetacea indet.

Strahov Monastery, Royal Canonry of Premonstratensians at Strahov (Praha): two dry penes. O: unknown; OD: absent, presented as elephant trunks. PL=1840 and 1840. A detectable *corpus cavernosum penis* (cf. BLAND & KITCHENER 2001) was clearly identified in the penes. N: considering their size, the penes could originate from representatives of the following genera: *Balaena*, *Balaenoptera*, *Berardius*, *Eschrichtius*, *Eubalaena*, *Hyperoodon*, *Megaptera*, or *Physeter* (cf. REEVES et al. 2002).

Regional Museum Teplice (Teplice): a penis of an unknown cetacean. O: unknown; OD: absent.

Moravian Museum (Brno), **the Anthropos Pavilion**: a penis of an unknown cetacean. O: unknown; OD: absent. PL=2260.

CONCLUSION

In the previous part of the catalogue (ROBOVSKÝ & BENDA 2006), we suggested the existence of cetacean material in various public exhibitions and/or depositories in regional museums, castles, monasteries, etc. but we did not have any actual information on the specimens. Therefore, one of us (JR) addressed all Czech institutions which might store such material and we obtained information about some additional cetacean specimens. In spite of our effort, there still may be some specimens not included in the catalogue. Two hemimandibles of a large whale in the Lednice Castle are an apposite proof that several significant specimens could be stored in cultural institutions for a long time without any reflection by zoologists. Isolated collections in schools are probably the most promising source of additional specimens, but the total evidence of animal specimens is probably actually incomplete. For example, we obtained information about a skull of *Phocoena phocoena* in the Jirsík Grammar School (České Budějovice), one damaged skull of *Delphinus delphis* in the Museum of South-Eastern Moravia (Zlín; inventory number ZM 42823031/01; AN I/122; date of origin 1905–1915(?), the history of this specimen is identical with a narwhal tusk ZM 4282221/01; parietal and frontal bones cut away) and one narwhal skull in the Hradec nad Moravicí State Castle (pers. comm., Eva KOLÁŘOVÁ, Raduň State Castle). We do not list some utilitarian objects associated for example with historical costumes/clothing, e.g. baleen in corsets or bodices. Alice SLÁDKOVÁ supplied us with a thorough list of such objects deposited in the Museum of Natural History and Geography in Vysoké nad Jizerou.

The list of specimens presented here indicates that cetaceans were an attractive enrichment of public and private collections (cabinets of curiosities). Narwhal tusks were very attractive from this point of view – as parts of mythical “unicorns” (cf. GREGOROVÁ 2007). Also whale penes seem to be interesting products of nature – their relative length and relatively unusual shapes have predisposed them to be really fascinating natural curiosities. Many old images of stranded or caught large cetaceans showed relaxed penes due to the postmortal changes in body tensions (see SLIJPER & HARRISON 1979, MAZÁK 1988, SMEENK 1997, etc.). These relaxed penes could not be overlooked by accidental observers. Additionally, penes and associated connective tissue have a slower disorganisation – the first author of this paper found a dead male of the beluga

(*Delphinapterus leucas*) in Norway (2004), with a relatively clear skeleton without soft tissues, but its penis and the associated connective tissues were still well preserved.

Similarly, large bones of large cetaceans (whales) have been often exhibited in castles or town entries around Europe, e.g. in the Cathedral of Wawel, Krakow, Poland. Several hemimandibles of *Balaena mysticetus* in collections in the Czech Republic, specifically a hemimandible collected between 1618–1648 by M. M. GOLZT (for details see the previous catalogue version) are additional proof of the attractiveness of the (large) cetaceans.

A small number of cetacean specimens per institution shows that only the collections in the Municipal Museum and Library in Čáslav and Zoological Museum in Protivín were intentionally collected for educative and/or scientific purposes. The Čáslav collection was accumulated by Josef KAUNICKÝ (1819–1908), a joiner and piano tuner and also an enthusiast in natural history. He spent 25 years in London where he visited lectures by Thomas H. HUXLEY and communicated with Charles DARWIN (Čáslav Museum archive, J. ŠANDEROVÁ, in litt.). KAUNICKÝ collected a number of exotic specimens for the Čáslav Museum – their first exhibition dates back to 1884. The whole exceptional collection is installed in the showcases made according to the showcases from the British Museum and represents one of the most spectacular zoological exhibitions in the Czech Republic. The Zoological Museum in Protivín is a new private institution associated with the Protivín Crocodile Zoo and the enthusiastic activity of Miroslav PROCHÁZKA. The collection now comprises more than 1200 specimens, mostly of vertebrates, many specimens are scientifically very important (e.g., crocodiles, cats, elephants, rhinoceroses, etc.).

SOUHRN

Dodatek k publikovanému Katalogu kytovců (Mammalia: Cetacea) ve vybraných sbírkách České republiky se zvláštním zřetelem ke sbírce Národního muzea v Praze (ROBOVSKÝ & BENDA 2006) je založen na detailní revisi sbírek velkého množství institucí (musea, hrady a zámky, kostely, soukromé sbírky, etc.). Ve sbírce Národního muzea v Praze byla nalezena další lebka běluhy (*Delphinapterus leucas*), kulohlavce (*Globicephala melas*), narvala (*Monodon monoceros*) a kosatky dravé (*Orcinus orca*). Zároveň byla určena taxonomická příslušnost dvou exemplářů delfinovců ze sbírky v Národním muzeu nepřesně uvedené v předešlé verzi katalogu, *Inia geoffrensis geoffrensis* (lebka) a *Platanista gangetica* s. str. (kostra). Další exempláře kytovců byly nalezeny v některých menších sbírkách. Nejvýznamnější určené položky představují lebku delfinovce ganžského (*Platanista gangetica* s. str.) a dva izolované zuby vorvaně (*Physeter catodon*) z Městského muzea a knihovny v Čáslavi, lebka delfinovce laplatského (*Pontoporia blainvillei*) ze Zoologického muzea v Protivíně, dvě izolované bubinkové výdutě velkého kytovce z Musea východních Čech v Hradci Králové a spodní čelisti velryby grónské (*Balaena mysticetus*) ze Státního zámku Lednice (viz obr. 1–3).

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ERRATA

In the previous part of the Catalogue of cetaceans in selected collections of the Czech Republic (ROBOVSKÝ & BENDA 2006), several points were mentioned erroneously:

Abstract (page 127): all collections contain 232 specimens of cetaceans and the most important specimens are complete mounted skeletons of *Balaenoptera physalus* and *B. acutorostrata*.

Abbreviations (page 129): PRWL and PRWR are pelvic rudiment widths on the left/right side.

Catalogue (page 135): *Delphinus delphis*, NMP 90989, RW≈67.5 mm.