

## Early descriptions of whales

Many of the early descriptions of whales and their behaviour and ecology were published in languages other than English. These were often sections in books or articles that were more broad in scope, for example general works on zoology or geography. If translations into English exist at all, they are often not very precise with respect to the cetacean component. The Journal invites submissions of such descriptions. Submissions should include: full bibliographic information; a brief introduction to the author and the work in which the description is included; the full text in the original language; and a careful translation.

P. BELON. 1551. NATURAL HISTORY OF STRANGE MARINE FISHES, WITH THE TRUE PICTURE AND DESCRIPTION OF THE DOLPHIN AND SEVERAL OTHERS OF ITS KIND, REGNAUD CHAUDIÈRE, PARIS.  
*[L'HISTOIRE NATURELLE DES/ ESTRANGES POISSONS MARINS,/ AVEC LA VRAIE PEINTURE & DESCRIPTION DU DAULPHIN, & DE/ PLUSIEURS AUTRES DE SON ESPÈCE, OBSERVÉS PAR PIERRE BELON DU MANS. /AVEC PRIVILÈGE À PARIS DE L'IMPRIMERIE REGNAUD CHAUDIÈRE, 1551]*

### INTRODUCTION

The life of Pierre Belon (1517-1564), a naturalist and a physician, was appropriately described as ‘an adventurous existence’ by his biographer, Delaunay (1926a). When a young man, Belon studied in Wittenberg, Germany (1540-1541), where he had conversations with Martin Luther, and travelled in Flanders and England. In 1542-1543, he was responsible for a diplomatic mission in Switzerland and Germany, and took part, some years later, in another diplomatic mission in the orient (1546-1549) at the request of the King of France, François I. On this occasion, he explored Italy, Greece (including several islands), Turkey, Palestine, Lebanon, Syria and Egypt. After returning from this long and complicated journey, he visited England again before studying medicine in Paris and Montpellier. He died in 1564, murdered in the Bois de Boulogne near Paris. He was a geologist, a botanist and a zoologist, and produced a considerable body of work (Delaunay, 1926b). Belon undoubtedly ranks among the pioneers of comparative anatomy, ichthyology and ornithology (Petit and Theodoridès, 1962).

After Aristotle (382-322 BC) and Pliny the Elder (AD 23-79), there was no work describing cetaceans until the thirteenth century. The book by Albertus Magnus (1206-1260), *De Animalibus*, is nothing more than a repetition of the Ancients’ words; however, a passage of the *Speculum Regale* (The Royal Mirror), written about 1250 by an anonymous Norwegian author, gives some original information on the cetacean fauna present around Iceland. Appearing long after the Norwegian work, the *Historiae Animalium*, published between 1551 and 1558 by Conrad Gesner, was ‘vast and imaginative in more ways than one’, but contained ‘little that was original’ (Harrison, 1972). This is why *L'Histoire Naturelle des Estranges Poissons Marins* (Paris, 1551) – *The Natural History of Strange Marine Fishes* – can actually be considered as the first cetological work published after Aristotle and Pliny. It was followed by a second, more general book by Belon (1553), *De Aquatilibus*, translated into French (Belon, 1555) under the

title *La Nature et la Diversité des Poissons* – The Nature and Diversity of the Fishes, dealing with all aquatic animals (cf. Pilleri and Arvy, 1981).

First of all, Belon was a remarkable anatomist (Cole, 1944), who dissected various specimens of the small cetaceans supplied to the markets of Paris by the fishing harbours of Normandy. In addition, he probably had the opportunity to observe live cetaceans at sea, especially during his cruises through the Mediterranean.

The first part (first book) of Belon’s book is a review of the knowledge collected by the Ancients (mainly Aristotle and Pliny), with a critical comment on the dolphins depicted on antique coins. The author subsequently (Chapters XL and XLII) gives a detailed description of the external morphology of the ‘Dolphin’ (most probably *Delphinus delphis*), and the ‘Porpoise’ (*Phocoena phocoena*), as compared to that of humans. This is an occasion for him to consider some biological and physiological questions, mainly bearing on reproduction and respiration. Concerning zoology, Belon’s contribution to taxonomy is significant, with the first clear identification and depiction of the three most common cetacean species in temperate European waters: the *Oye* (literally goose in old French) or *Bec d'oye* (goose beak), *Delphinus delphis*; the *Oudre* (*Tursiops truncatus*) and the *Marsouin* (*Phocoena phocoena*). In addition, Belon accurately points out the fundamental differences that distinguish cetaceans from the other kinds of ‘fishes’ (as suggested by the contents of his second book, Belon designates by this term all aquatic animals, vertebrates or invertebrates), and he gives valuable information on the exploitation (second part, Chapter XVII) and economic use (Chapters XII and XVII) of these animals in the middle of the 16th century.

In spite of its obvious importance for the history of marine mammal science, Belon’s book remains poorly known by most non-French speaking authors; a situation that may be due to the difficulty of obtaining this text outside France (Allen, in his bibliography dated 1881, quotes the text with the mention ‘not seen’) and of deciphering its Old French. The excerpts presented below give a view of the various

aspects of this historical work (the presentation of some chapters is restricted to their titles). We have tried to reproduce as closely as possible the style and structure of Belon's text, even when he uses irrelevant words, concepts that we consider today as erroneous, or ambiguous turns of phrase (clarifying information is given in square brackets). The punctuation reproduces that of Belon as far as possible.

#### **English translation of excerpts**

[Dedication] To his Eminence Cardinal de Chastillon, liberal Maecenas of studious men.

I am preparing to render to you the true figures of the dolphins, as observed from both the natural and the antique, to which I neither added artificial elements nor withdrew anything, in order to present and demonstrate them to you, and I also included to this work all the history belonging to the Dolphin's nature ... I thought it good to write this history in our language [the French, or 'vulgar' language] so that more people have pleasure from it.

#### *The first book [first part]*

##### **CHAPTER XL. A DESCRIPTION OF THE EXTERNAL PARTS OF THE DOLPHIN.**

The largest I have ever seen was brought to Rouen in the year 1550, during the month of July, and I could observe its size. The lune [new-moon-shaped portion] of its tail was more than one foot and a half from one tip to the other ... the thickness of its body, as established with a rope that was then measured, was six hands [approximately 6 × 8cm = 48cm]... Its length was as much as a man can reach with his hands when he stretches his arms. Its beak was one hand and a half long [12cm], starting from the place where it begins to be flat ... And, though its inner parts had been removed before it was brought, it still weighed about three hundred pounds ... Dolphins have but three wings [fins] only, with just one raising from their back.

Nature has not provided the Dolphin with external armours, and if it rules over or governs the others, this is due to its valour and not to strength of arms. Because all that it has to [do] harm to others or defend itself are its teeth. Its skin is completely smooth and slippery, as is also the case for all other fishes included in the species of its kind which are the *Cetacea*. It has no scales, and bears its tail unlike the other fishes ... The Dolphin bears it oblique [i.e. not vertical], like the birds ... Dolphins having an oblique tail, they just swim with the weight [i.e. power] of their bodies, not with any work of their wings, but they need only to be helped by their tail that leads their body, and their tail is crescent-shaped ... the above quoted tail gives them a very great strength when moving because it is robust ...

The Dolphin has very small eyes, as compared to the length of its body. Its auditory ducts are so narrow that no obvious trace of hole appears if one does not look closely. To find them, one must seek them along a straight line starting from the corner of the eye and going to the wings [flippers], and they will be found at a distance of six fingers from the eye ...

However closely one looks, the ducts for smelling do not appear but in new-born calves, about one or two months old. As they begin to become big, they lose them. One can also see them [ducts for smelling] in those taken from the matrix [uterus], which have small white hairs, like short barbels, on each side on the upper part of the upper jaw, but they are stiff ... All other fishes have gills, which are openings on both sides. But the Dolphin does not have them. Since nature have denied that to the Dolphin, it has given it a flute, with an

opening on top of the head, directly between the two eyes, and through this flute or pipe it expires and inspires air, and rejects water, and makes noise ... Its teeth number one hundred and sixty as a whole, very pointed, and rounded as well, ordered by length, forty on each side of the jaws. It has a nearly mobile tongue, like that of a pig ...

##### **CHAPTER XLII. THE EXTERNAL DIFFERENCE BETWEEN MALE AND THE FEMALE DOLPHINS.**

... Male Dolphins have an opening by the middle of the belly, in which the sheath of the shameful organ retracts and is enclosed: and it is possible to pull it [the organ] out by one end: and when it is pulled out strongly, it comes quite large and is more than eight inches in length. It [the Dolphin] still has another small hole below [i.e. behind], which is the excrement duct, which is much farther towards the tail. But the female does not have such an opening in the middle of its belly, but has one lower than that of the male, which is the hole of nature, and is joined somewhat lower by the excrement opening, separated like in other terrestrial animals.

##### **CHAPTER XLIV – DESCRIPTION OF THE PORPOISE, AND DIFFERENCE BETWEEN PHOCA AND PHOCOENA.**

##### **CHAPTER XLV – DESCRIPTION OF ANOTHER SPECIES OF PORPOISE NAMED OUDRE [TURSIOPS TRUNCATUS].**

It was found in the ocean, and fished at the shore of the Treport, which is a harbour along the coast of Normandy, and was brought to Paris with a cart. It was one of the largest fishes ever seen there ... it was nine and a half feet long ... [it was] wrapped in a rope through the middle of the body and that rope measured three feet and a half ... its nose is much shorter and flatter and thinner [?] than that of the Dolphin. The lower jaw ... is longer than the upper one ... there is a total of eighty [teeth] ...

There is nothing more to add to its external portrait, except that the one I am speaking of now was a female, that had a calf in its belly which had not already reached its final length, because this occurred at the beginning of May 1551, however, it was already so big, that it measured two cubits in length ... this female had mammae, one on each side, that were quite conspicuous.

#### *The second book [second part]*

##### **CHAPTER II. DO THE DOLPHIN AND PORPOISE, LEAVING WATER, COME TO THE AIR TO EXHALE OR TO INHALE ?**

I long wondered, when seeing the Dolphin or Porpoise coming to the air, if they came to inhale or to exhale ... But actually they come to do both: because when they have remained a long time in the sea without breathing, the first thing they do is to reject the air that they had taken with them into the sea, because when they go out, they make noise rejecting air and water into the air, and they immediately need to take air again, because it is absent from the sea, in such a way that if one of these animals were tied on the sea bottom, it would quickly suffocate by lack of breath.

##### **CHAPTER IV. ON THE ANATOMY OF THE INTESTINES AND OTHER INNER PARTS OF THE DOLPHIN AND PORPOISE.**

##### **CHAPTER V. A COMPARISON OF THE MAMMÆ OF THE DOLPHIN WITH THOSE OF ALL OTHER ANIMALS. SOME OF WHICH HAVING THEM ON THEIR CHESTS, OTHERS ALONG THEIR BELLIES, AND OTHERS NEAR THEIR GROINS.**

... its mammae are hidden beneath its skin, between epigastric muscles along its belly, and it is easy to find them quickly if the external teat is followed. The Dolphin and Porpoise and several other fishes that have lungs, have only

two mammae teats: but nature has not done that without a reason because like the woman who most often gives birth to one at a time: nature consequently gave her only two teats, knowing well that they can be enough for a single baby. Similarly the other aquatic or terrestrial animals that have only one calf at a time, have nothing to do with several mammae.

#### **CHAPTER VI. THAT THE WHOLE ANATOMY OF THE DOLPHIN BRAIN, AGREES IN ALL PARTS WITH THAT OF MAN.**

The aspect of the anatomy of the Dolphin which appeared most admirable to us, even seeming artificial, is the brain and its parts ...

The stony bones, called Lithoydi: of which there is one on each side, and under which the nerve of hearing enters the head. These bones are unequal and hard as stones that are hollow inside ...

#### **CHAPTER VII. A COMPARISON OF THE FEEDING OF SMALL DOLPHINS, IN THE BELLIES OF THEIR MOTHERS, WITH THAT OF TERRESTRIAL ANIMALS.**

The Dolphins and Porpoises and all other cetacean fishes of their kind, that we could observe, do not bear more than one calf at a time ... The calves stay ten months in their bellies, where they become very large, to the point that when they are released, they already have an unusual size ... And though the matrix [uterus] has two horns, they are already filled enough by a single baby Dolphin. One of the matrix horns is not as large as the other. The tail of the baby Dolphin is somewhat curved in the small horn of the matrix, as also the envelope in which the baby is wrapped, that is called chorion by the Greeks.

#### **CHAPTER XII. HOW TO DISTINGUISH THE FLESH OF THE DOLPHIN FROM THAT OF THE PORPOISE, AND WHICH IS THE BEST.**

The food sellers and other people that see each day Dolphins and Porpoises being cut up in fish shops, know well which one is better to eat ... The Dolphin is not as fat as the Porpoise. And insofar as the Dolphin is not as fat, it has a better taste, and is much more profitable and more delicious than the Porpoise ...

#### **CHAPTER XVI. ON THE ANATOMY OF THE BONES OF THE DOLPHIN, PORPOISE AND BOTTLENOSE.**

... except that the bones of the legs are not present, it is similar to that of Man ... the tail is just made of a fibrous matter with no other bones. But the wings or arms on both sides of the Dolphin, though short; have nevertheless the same bones as those of Man.

#### **CHAPTER XVII. ON THE FACT THAT DOLPHINS ARE RATHER CAUGHT BY CHANCE THAN INTENTIONALLY, AND ON THE MANNER TO FISH THEM.**

Now I just want to speak of the usual manner to catch Dolphins in our sea, the latter being often caught by chance rather than by trapping: because to say the truth, the fishermen who intentionally spread their nets in the aim of catching other fishes, do not expect the Dolphins will be caught: but nevertheless, the Dolphins are more often taken this way than otherwise. This is one manner to catch them. Since the Dolphins are obliged to often surface to breathe,

and then return under the sea for foraging, they are watched for by the sailors and as soon as the sailors see them approaching their boat, they get ready along the boat with harpoons, waiting for the Dolphins and Porpoises to come out for taking air near the boat: then they whistle to attract them nearer. And if the sailors see a good opportunity, they throw their harpoons: which are tied to a thin rope more than twenty or thirty *aulnes* [approximately 24 to 36m] long. The sailors cruising far offshore especially keep harpoons in their ships to throw them at all species of cetacean fishes ...

#### **CHAPTER XVIII. THE DOLPHIN AND THE PORPOISE ARE NOT SALTED EXCEPT IN FRANCE.**

Among French salted cetacean fishes, I know only the Whale, the Porpoise and the Dolphin [i.e. *Delphinus delphis*] ...

Porpoises and Dolphins can readily be skinned in order to keep the skin [*sic*] for some years, a thing that I experienced to be true.

Regarding the anatomy that I described I am willing to declare that I did not make it in a underhand manner, but publicly, last year in the College of Medicine, while Sir Goupil was reading the Dioscorides in Greek, with a good attendance and a very large audience, and a multitude of knowledgeable students in medicine attended to this anatomy: and I am sure that none of those who were present will deny that I have then demonstrated it [the anatomy] in much greater detail than I did in this book.

#### **Original text**

[Dédicace] A monseigneur le ... Cardinal de Chastillon, Liberal Mecenas des hommes studicus.

Je me suis mis en devois de vous rendre les vraies peintures des dauphins, retirées tant du naturel que de l'antique, ausquelles ie n'ay rien adiousté d'artifice, ni diminué, non plus qu'on y a trouvé: afin de vous les présenter mais non sans vous en faire démonstration car i'ay aussi escript toute l'histoire qui appartient à la nature du Daulphin ... Laquelle histoire il m'a semblé bon de la mettre en notre langue, desirant ... que plus de personnes en eussent plaisir.

*Le premier livre...*

#### **CHAPTER XL - DESCRIPTION DES EXTERIEURES PARTIES DU DAULPHIN.**

Le plus grand que j'aye one veu, fut apporté a Rouen l'an mil cinq cent cinquante, au mois de Iuillet, duquel i'observay la grandeur. La lune de sa queue avoit en l'intervalle d'une des cornes à l'autre, plus d'un pied & demy....l'espesseeur de son corps embrastée avec une corde, puis mesurée, avoit six paulmes...Sa longueur estoit autant qu'un homme peult atteindre des deux mains en étendant les bras. Son bec commençant de la ou il estoit camus, estoit long d'une paulme et demye ... Et estant vuidé des ses interieures parties comme on l'avoit apporté, il poisoit bien trois cent livres... Les daulphins n'ont que trois asles en tout, dont une seule est eslevée dessus leur dos...

Nature n'ha armé le Daulphin d'armures extérieures, & s'il domine ou commande aux autres, c'est par sa vertu, & non par force d'armes. Car en tout ce qu'il ha pour nuyre aus autres, ou se défendre, sont seulement les dents. Il ha la peau totalement lubrique & glissante comme aussi toutes autres poissons mombrez es especes de son genre c'est à dire *Cetacea*. Il est sans écailles & ha la queue contre la règle et

coustume des autres poissons... le Daulphin la porte oblique comme sont les oiseaux... Les Daulphins ayant la queue oblique, nagent seulement de la pesanteur de leur corps sans point y travailler leurs aisles, mais seulement leur suffit estre aidez de la queue qui conduyse le corps, laquelle ils ont compassée à la façon d'un croissant... la dite queue leur baille une tres grand force en nouant, car elle est robuste...

Le daulphin a les yeux forts petits, veu la grandeur de son corps. Les conduits de son ouye sont si petits que n'y apparoist aucune connoissance de pertuis, si l'on y regarde exactement. Celui qui les voudroy trouver, les cherche en cette maniere qu'il commence au coin de l'œil, & suye de droicte ligne allant vers les aisles, & il les trouvera distants a six doigts de l'œil...

Les conduits pour odorer, quelque diligence qu'on sache faire, ne sont apparoissants sinon es petits, nouvellement naiz, comme d'un mois ou deux mois. Car commençant a devenir grands. Il perdent cela. On les voit aussi en ceuls qu'on a tiré de la matrice, lesquels ont des petits poils blancs comme barbeaux, de chaque coste de la partie de dessus de la machouere d'en hault, mais ils sont durs... Touts les autres poissons ont des ouyes, qui sont ouvertures par les deux coitez. Mais le Daulphin n'en ha point. Car comme nature luy ha nyé cela, elle lui a baillé une fluste, au conduit dessus la teste, droictement entre les deux yeuls, par laquelle fluste ou tuyau il respire et aspire en l'air, & iecte l'eau, & fait du bruit... Ses dents sont de compte faict cent soixante en tout, moult pointues, & rondes, en longueur dispoesées par ordre, quarante en chaque coste de la machouere... Il a quasi la langue a deliure, comme est celle d'un porceau ...

#### CHAPTER XLII – LA DIFFÉRENCE EXTÉRIEURE DU DAULPHIN D'ENTRE LE MASLE ET LA FEMELLE.

... Les Daulphins masles, ont une ouverture par le milieu du ventre, en laquelle se retire le fourreau de leur membre honteuls, qui est enclos la dedans: lequel on peut tirer en dehors en le prenant par le bout: et quand on le tire bien fort, il sort hors moult gros: & ha plus de huict poulces de long. Il ha encore un autre petit pertuis au dessous, qui est le conduit de l'exrement, lequel est beaucoup plus bas vers la queue. Mais la femelle n'ha point de telle ouverture au milieu du ventre, sinon qu'elle en ha plus bas que celle du masle, qui est le pertuis de la nature, ioignat lequel un peu au dessous est senblablement le pertuis de l'exrement, separé comme es animauls terrestres.

#### CHAPTER XLIV – DESCRIPTION DU MARSOUIN, & DIFFERENCE DE PHOCA & PHOCOENA.

#### CHAPTER XLV – DESCRIPTION D'UNE AUTRE ESPÈCE DE MARSOUIN SURNOMMÉ UNE OUDRE.

Elle fut trouvée dedans l'ocean, & peschée au rivage du Treport, qui est un havre en la coste de Normandie, & fut apporté par charoy a Paris. Ce fut l'un des plus grands poissons qui y eusse one veu... il avoit neuf pieds & demy... empoigné par le travers du corps avec une corde, puis mesurée, elle avoit trois pieds & demy... il a le nez beaucoup plus camus & mince que n'ha le Daulphin. La machouere d'en bas... est plus longue que celle du dessus ... il en ha en tout quatrevingt (dents)...

Il ne reste rien a descrire de son extérieure peincture, sinon que celui dont ie parle maintenant, estoit femelle, qui auroit un petit dedens le ventre, lequel par lors n'estoit encore pas parvenu a iuste grandeur, car c'estoit au commencement de may, mil cinq cent cinquante & un, toutefois il estoit desia si

grand, qu'il avoit deux coudées de long... Cette femelle avoit des mamelles, une de chasque costé, qui estoient moult manifestes.

*Le second livre...*

#### CHAPTER II – A SAVOIR SI LE DAULPHIN & MARSOUIN SORTANTS HORS DE L'EAU VIENNENT EN L'AIR POUR RESPIRER, OU POUR ASPIRER.

I'ay long temps esté en double voiant le Daulphin & Marsouin venir en l'air scavoir s'ils venoient aspirer ou respirer... Mais il faut dire qu'ils y viennent pour faire tout les deux: car apres qu'ils ont esté long temps en la mer sans prendre haleine , la chose qu'ils font la premiere est de iecter hors celui vent qu'ils auvient porté en la mer, car sortants hors, on les voit bruire en iectant du vent & de l'eau en l'air, & fault soudain qu'ils en reprennent d'autre, car il n'y en ha point en la mer, tellement que qui auroit lié un desdicts animauls au fond de l'eau, il seroit incontinent suffoqué par faulce d'haleine.

#### CHAPTER III – DE L'ANATOMIE DES INTESTINS & AUTRES PARTIES INTÉRIEURES DU DAULPHIN ET DU MARSOUIN.

#### CHAPTER V – COMPARAISON DES MAMELLES DU DAULPHIN CONTRE CELLES DE TOUTS AUTRES ANIMAULT. DESQUELS LES UNS LES ONT EN LA POITRINE, LES AUTRES LE LONG DU VENTRE, LES AUTRES AUS ESNES.

... les mamelles sont cachées dessous la peau entre les muscles de l'epigastre le long du ventre, et il est facile de les trouver incontinent, si l'on suit le petit bout extérieur... Le Daulphin & Marsouin & plusieurs autres poissons qui ont poumon, n'ont que deux bouts es mamelles: mais nature ne l'ha pas faict sans raison car comme nous voyons la femme enfanter le plus souvent un seul au coup: aussi nature ne luy ha donné que deux tetins, sachant bien qu'ils peuvent suffire a un seul. Semblablement les autres animauls aquatiques ou terrestres qui n'ont qu'un petit a la fois, n'ont eu affaire de plusieurs mamelles.

#### CHAPTER VI – QUE TOUTE L'ANATOMIE DU CERVEAU DU DAULPHIN, CONVIENNE EN TOUTE SES PARTIES AVEC CELUI DE L'HOMME.

La chose de cette anatomie du Daulphin qui nous a esté la pl'admirable & semblé artificielle, est le cerveau et ses parties....

Les os pierreux, nomez Lithoydi: desquels il en a un de chasque coste, & dessous duquel le nerf de l'ouie entre au dedans du test. Ces os sont inegaults & durs come pierres creuses en encavez par le dedans...

#### CHAPTER VII – COMPARAISON FAICTE DE LA NOURRITURE DES PETITS DAULPHINS, ES VENTRES DE LEUR MERES, AVEC CELLE DES ANIMAULT TERRESTRES.

Les Daulphins ne les Marsouins & tous autres poissons Cetacees de leur espece, que nous avons peu observer, ne portent point plus d'un petit a la fois... Les petits sont dix moys en leur ventre, ou ils deviennent moult grands, tellement que quant ils en sortent hors, ils sont desia d'une inusitée grandeur... Et encore que la matrice ait deux cornes, toutefois elles sont assez occupées d'un seul Daulphineau. L'une des cornes de la matrice n'est pas si grande que l'autre. La queue du Daulphineau est quelque peu recourbée dedans

la petite corne de la matrice, & aussi la fecondeine ou tunique en laquelle est enveloppé le petit, laquelle les grecs nomment chorion...

**CHAPTER XII – COMMENT LA CHAIR DU MARSOUIN EST DISTINGUÉE DE CELLE DU DAULPHIN & A SCAVOIR QU'ELLE EST LA MEILLEURE.**

Les vivendiers & autres gents qui voient journellement trencher les Oyes ou Daulphins, & les Marsouins es poissonneries, scavent bien lequel des deux est le plus requis pour être meilleur à manger... le Daulphin ou Oye n'est pas si gras qu'est le Marsouin. Et pour autant que le Daulphin n'est pas si gras, aussi est de meilleur goust, & beaucoup plus profitable & plus delectable que n'est le Marsouin...

**CHAPTER XVI – DE L'ANATOMIE DES OS DU DAULPHIN, MARSOUIN & OUDRE.**

Schelete...osté qu'on n'y trouve point les ossements des iambes, il est semblable a celui de l'homme... la queue est seulement composées d'une matière nerveuse sans autre ossements. Mais les aelles ou bras des deux costez du daulphin, encore qu'ils soient courts ; si est ce qu'ils ont tous les mesmes ossements de l'homme.

**CHAPTER XVII – QUE LES DAULPHINS SOIENT PRIS PLUSTOST PAR HAZARD QUE DE PROPOS DELIBERÉ, & DE LA MANIÈRE DE LES PESCHER.**

Maintenant ie veul seulement parler de la maniere qu'on ha accoustumé d'user en pescant les Daulphins en notre mer, lesquels sont pris souvent par fortune que par aguet: car a dire la verité, les poissonniers qui tendent les filets de propos deliberé pour prendre les autres poissons, n'esperent pas que les daulphins y viennent frapper pour se prendre: & toutesfois les Daulphins sont plus souvent pris de telle maniere que autrement. Voilà quant a une maniere de les pescher. Les Daulphins estant contraicts de sortir souvent pour prendre l'air, & puys retournant en la mer a leur pature, sont guettez des mariniers car incontinent que les mariniers les ont veu approcher de leur vaisseau, ils se preparent sur le bord du navire avec des Harpons, attendant que les Daulphins & Marsouins retournent prendre l'air vers le vaisseau: alors ils les sifflent a fin de les faire approcher plus pres. Et si les mariniers les voient a leur avantage ... ils dardent le Harpon: lequel est attaché a une cordelette longue de plus de vingt ou trente aulnes...Les mariniers qui vont en voyage lointain en portent expreſſement en leur navire pour lancer indifferemment sur toutes espèces de poissons Cetacées...

**CHAPTER XVIII – QU'ON NE SALLE LE MARSOUIN & DAULPHIN SINON EN FRANCE.**

Entre les salures francoises des poissons Cetacées ne cognoy que la Baleine, le Marsouin & l'Oye ... Les Marsouins & Daulphins peuvent bien être escorchez pour en garder la peau iusque a quelques années: chose que j'ai experimenter estre vraie..

Quant a l'anatomie que j'ay descripte ie veul bien faire entendre ne l'avoir faict en cachettes, ains l'avoir faict publiquement, l'an passé au College de medecine, lors que Monsieur Goupil lisoit le Dioscoride en Grec, avec moult frequent & tres grand auditoire, a laquelle anatomie assista une multitude de plusieurs scavants escoliers medecins: & m'asseure qu'il ne s'en trouvera pas un de ceuls qui estoient presents, qui ne die que ie ne l'aye monstree beaucoup plus par le menu que ne l'aye descripte en ce present livre.

*Submitted by:*

*Daniel Robineau and Vivian de Buffrénil  
Laboratoire d'Anatomie comparée  
Muséum National d'Histoire Naturelle  
55 rue Buffon, F-75005 Paris, FRANCE  
Contact e-mail: banat@mnhn.fr*

DR and VDB greatly appreciate review of the translation by W.F. Perrin and D. Smith.

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