## **Historical Perspectives**

## Dr. W. (Willem) H. Dudok van Heel

(Born 13 May 1927)

Dr. van Heel was born and brought up in Bussum, Netherlands, against the background of an old agriculture family farm, cultivating sugarbeet seed in particular. He attended the Gymnasium (High School) in Hilversum, passing his final exam in June 1947, having lost a year because of the hunger winter of 1944-1945 in the western part of occupied Holland during World War II. Military service followed from November 1948 to September 1950. In the autumn of 1948, after an officer training course, he and most of his classmates were sent to the former Dutch East Indies, now Indonesia, for field service, where they were promoted to Lieutenant. With New Year's 1950 approaching, he was posted for the remaining months of his tour in Djakarta where he met and got engaged to his future wife, who was serving her term with the Royal Netherlands Navy Women Service. Returning home in the late summer of 1950, he was discharged from the army that autumn. He started to read Biology at the University of Utrecht in January 1951, specializing in Comparative Sensory Physiology. He married his fiancé, from the start a staunch assistant throughout the many years to come, in January 1955 and passed his Doctoral (Master's) exam in June 1956.

Van Heel was also brought up with sailing on his father's yacht, a traditional Dutch vessel with leeboards, a so-called Vollenhovense Bol. The history and construction of these round- and flat-bottomed vessels took his interest, and he studied the building process of a traditional botter at the nearby shipyard of the fishing harbour of Huizen, Netherlands. In his Den Helder years, he published two papers (1960, 1962) on the history of the Vollenhovense Bol, the only Dutch traditional vessel of which we know how this type of vessel came into existence. In his student and Den Helder years, van Heel also enjoyed falconry as a hobby and as a means of studying animal training.

In September 1956, van Heel, planning to extend his research on hearing by studying live cetaceans, met Mr. E. F. den Herder in Harderwijk, which led to intense future cooperation—the subject of the adjoining article. A few weeks later, on 1 December 1956, he joined the staff of the Zoological Station, Den Helder (now the Netherlands Institute for



Sea Research at Texel). In the winter and spring of 1957-1958, he organized the expedition to Denmark, which in fact initiated his research on Cetacea (Dudok van Heel, 1962, and adjoining article, this issue). However, the Station was specifically studying invertebrates, so obtaining a Ph.D. on Sound and Cetacea (Dudok van Heel, 1962)—during which period he was not obstructed in any way, if not encouraged to persevere—was actually irregular. The Board of the Institute at that point of time decided that invertebrates should remain the main focus of interest and that staff members should comply, notwithstanding the fact that visiting university students or scientists would be welcomed and offered a niche in order to study marine vertebrates.

As a consequence of the Board's decision, van Heel submitted a request to NATO (Europe) for sponsoring extended research on the hearing and signals of *Phocaena phocaena L*. in Danish waters. By chance, Dr. R. Busnel, Institute of Audiology, Paris (well-known for his studies on bird sounds), intended to start studying dolphin signals. At approximately the same time as van Heel, he submitted a similar request with NATO. NATO agreed, providing Busnel and van Heel were prepared to cooperate and, as they would be working in Denmark, to invite a Danish scientist to join the team. Busnel and van Heel agreed, and at the end of the summer of 1963, van Heel left the Zoological Station.

At the same time, the family boarded their newly renovated Dutch barge MV Cachelot, which was

originally built in 1904 as a seagoing, two-masted sailing vessel. It was 23.90 m long, 4.90 m wide, and had a loading capacity of 110 metric tons. Late September 1963, MV Cachelot and crew sailed for Middelfart, Denmark, where they found Søren Andersen Mag.—a friend to be—as the Danish representative for the new project. It soon dawned on van Heel that NATO had put the grant at the disposal of the French institute, and cooperation with Dr. Busnel became strained to put it mildly. Trust, essential to good cooperation, petered out. Van Heel felt he had been used and had lost control over his part of the project. When the Dutch official representative with NATO confirmed this situation, van Heel ended his participation of this, typical, French connection. In January 1964, he and his family returned to Holland.

MV Cachelot berthed in Emmeloord, Netherlands, where van Heel took up teaching biology at the local Christian High School—a period of his life which in time turned out to be very beneficial to the expected future plans at Harderwijk, which were about to develop.

True to his words, in 1963 (Dudok van Heel, 2009, this issue), Mr E. F. den Herder asked van Heel to come and join him in the summer of 1964 to discuss the definite planning, building, and operating of the future Dolfinarium. In April 1965, *MV Cachelot* sailed for Harderwijk.

The Dolfinarium opened on 9 July 1965 and was successful from the start. This led to additional building. First, the original outdoor show pool was roofed, closely followed by the construction of a domed building with a large show pool, two new holding pools, and a channel connecting the extension with the existing system (Dudok van Heel, 1970). Later, adjacent to and with a large open entrance, a restaurant was added to the original show pool building. The stadium around the original show pool was removed and replaced by an exhibition area around this pool, which, during the expansion, had been provided with a large, full-length window front at one side, providing an excellent underwater view of the dolphin family living there.

Right from the beginning, a speaker guided the shows and fed the public biological information on the animals. This probably caused the host of questions—orally and by letter—that started to pour down on van Heel, the speaker, and the trainers. This led van Heel to write a pocket book, *Dolfijn, Hoe Doe Jij Het?* (1970a), with a number of coloured plates on the evolution of animals in general, Cetacea and Pinnipedia in particular, and a fair number of black-and-white illustrations to clarify the text. The booklet was aimed at the interested layman, five- and six-form high school pupils, first-year biology students, and last, but

not least, teachers of biology. It was startling to discern that not only their pupils but also quite a number of teachers confessed that through these lectures they learned that Cetacea are not fish with a horizontal tail but mammals. Apparently, their training at University(!) had been far from ideal. In general, they had a profound lack of understanding for what "marine mammals" meant-that is, that they evolved from terrestrial creatures and chose an aquatic way of life, consequently developing the necessary adaptations to accomplish this. The material was written in Dutch, which the inhabitants of Flanders (W. Belgium) are fully able to understand and use, but the text was not understandable for the Wallonians (E. Belgium) who speak French. Professor Dr. J. P. Vanden Eeckhout, University of Brussels, approached van Heel, translated his improved manuscript, and published Extraordinaires Dauphins in 1973 with not only the original plates and drawings, but with quite a number of photographs as well.

The success of the Dolfinarium Harderwijk led to the establishment being asked to build and manage a dolfinarium in Brugge, Belgium, and later in the Münster Zoo, Westphalia, BRD. A fourth branch in Huy, Wallonia, Belgium was not successful and was eventually sold.

As a zoologist, Dr. van Heel was responsible for the animals and the shows in all four settlements. The developing research (pure and applied) of the Dolfinarium, however, was almost completely centered at Harderwijk.

In January 1972, van Heel started the journal *Aquatic Mammals*, a publication independent from the public-relations activities of the Dolfinarium. The journal had its own letterhead with a logo which still adorns its cover (see below). Two months later followed the Symposium, "Dolphins and Dolphinaria," at Harderwijk. During this meeting, van Heel proposed to the participants the founding of the European Association for Aquatic Mammals (EAAM). This was unanimously accepted and effected during the Symposium in Duisburg, BRD the next year (see the adjoining article).

Dr. F. W. Reysenbach de Haan and van Heel, seeing the animals performing, soon realized they not only had to study hearing but also vision. They found their good friend, A. Dral (Netherlands



EAAM logo, designed by Miss M. Mettivier Meyer

Institute of Sea Research, Texel) gladly ready to tackle—and more as it turned out—what they had in mind. This resulted in Dral's series of very important original papers, including the research of students from the University of Utrecht (Noordenbos & Boogh, 1974), but also Simons & Huigen (1977, 1979) in Münster, BRD. M. Huigen was van Heel's valuable head trainer, first at Brugge, Belgium, and later at Münster.

A dead female *Mesoplodon bidens* with a live calf stranded on the Belgian coast and were transported to Harderwijk, which also brought Dr. P. E. Purves (British Museum of Natural History, London) there. It led to the study entitled *Locomotion in Dolphins* (Purves et al., 1975), which was done in cooperation with the Ship Model Test Station, Wageningen, Netherlands.

To this end, the Institute carefully made a very precise set of lines of a dolphin, "Skinny," and built a full-sized wooden model for tank tests.

In 1975, Ir C. Kamminga from the Laboratory of Information Theory, University of Technology, Delft, Netherlands, joined our research group. He and his students were studying the signals of delphinids, leading to the final paper on "An Experiment in Two-Way Communication in *Orcinus orca L.*" (Dudok van Heel et al., 1982). Kamminga obtained his Ph.D. on 21 April 1994 with his thesis, *Research on Dolphin Sounds*.

In order to improve the understanding of water treatment apart from filtering (i.e., chlorination), comparative studies were conducted in Harderwijk, Brugge, and Münster and specifically with DVM V. J. A. Manton's dolphin pool at Wipsnade Zoo, England, where gas chlorination was used. van Heel studied the composition of original seawater and, as a result, improved the quality of the artificial pool water particularly with respect to trace elements.

Logically, initiated by our first veterinarian C. van de Hurk (1972), the nature and composition of the food of dolphins and its preservation was also the subject of research.

In the early 1970s, van Heel, at the request of Mr. E. F. den Herder, started his own company "Marine Mammals Advisors Ltd." This firm, by example, not only advised Durban Aquarium, S.A., and Särkenniemi Ltd., Tampere, Finland, to build their dolphin establishments but also organized and pre-financed an enterprise (1976) in Iceland—in cooperation with M. J. Gunnarsson, director of the marine zoo Saedyrasafnid, Hafnarfjördur, near Reykyavik—to catch killer whales. Shortly afterwards, Sea World of San Diego's director, Dr. L. Cornell, assisted by Mr. D. Goldsberry, joined the team. The best period to catch was in the autumn at the southeast coast of Iceland. In the late autumn, five young animals (eating fish,

not nursing!) were transported to the Dolfinarium, Harderwijk (Dudok van Heel, 1986). One female, "Gudrun," stayed at Harderwijk; the other four animals were flown to San Diego the following spring. Gudrun was, of course, a subject for research, in particular in cooperation with Ir Kamminga and his team, ending with the research on communication (Dudok van Heel et al., 1982).

In 1957-1958, the Netherlands Educational Film company followed van Heel and produced a 16-mm, 18-minute, black-and-white documentary on the expedition to catch harbour porpoises (Phocaena phocaena) in Denmark, their transport to Holland, and subsequent research on directional hearing, which led to the first part of his thesis. In the early 1970s, van Heel was first approached by Mr. Simon Cambell-Jones, who produced the documentary Horizon, a coproduction of BBC/Bayerischen Rundfunk. Film producer/director Robin Brown was the next interested visitor. From that meeting, three documentaries resulted for ATV/ITN: The Lure of the Dolphin (Narrator Anthony Grey!), The Gentle Killers, and The Talking Whale. The latter covered the paper by Dudok van Heel et al. (1982). These documentaries were shown all over the world and garnered much approval. The last one (filmed in 1981) was not shown in Holland.

The Australian film producer Robert Loader and his director, Tristram Miall, shot an important part of their documentary *Stranded* (about the problem of mass strandings of cetaceans) in Holland, including a remake, with help from the Royal Netherlands Navy, covering the second part of van Heel's thesis on this subject.<sup>2</sup>

The Dolfinarium was amember of the Netherlands Association of Zoos, and Mr. E. F. den Herder had asked van Heel to represent the Dolfinarium at the board meetings. In 1980, van Heel was asked to succeed the excellent first president, Mr. A. M. van Hooff, Director of Burger's Zoo, Arnhem, at the board meeting of 1 December 1980. At the beginning of this meeting, van Heel, having been dismissed from the Dolfinarium a few days earlier, had to tell his colleagues that he—thankfully for the trust, but regretfully—had to hand back his nomination and then left the meeting.

All of the members of the staff working with the animals—except Miss M. Mettivier Meyer, the lab assistant—had no previous experience in working with animals whatsoever. Carefully, over the years, van Heel trained all of them at Harderwijk and the establishments in Belgium and BRD. So, when dismissed, he knew his beloved animals were in able and trusted hands of men and women who loved the animals, too; understood all aspects of keeping marine mammals; and knew to whom to turn to in case of an emergency. Of course, as long as they were allowed to do so!

In the summer of 1981, van Heel was invited by Dr. G. Maus, project developer, Pulheim-Sinthern, BRD, whom he had met before, to join him in designing, building, and managing, as directors, the future "Seeland Aquarium," GmbH—actually an Oceanarium—in Mechernich (Eifel), BRD. A very interesting project. A dedicated, professional working group set to work immediately. In 1984-1985, with plans ready, the site available, planning permissions granted, and ready to start building, the decision had to be made, very reluctantly, to bow our heads and give up. The difficult economic situation of those days prevented Dr. Maus, in particular, in procuring the last 10 to 15% of private capital the bank required.

In 1984, urged by strong medical advice, van Heel decided to retire. *MV Cachelot* sailed for England, finding a berth in East Cowes, Isle of Wight, as their daughter and her family lived on the island.

In 1986, V. J. A. Manton, DVM, and Dr. van Heel, invited by Dr. M. M. Bryden and Prof. Dr. Sir R. Harrison, were honoured to each write a paper for the handbook, *Research in Dolphins*. Dr. Manton wrote on the subject that he and van Heel had so closely been studying and experimenting with together, "Water Treatment." van Heel, in his article, "From the Ocean to the Pool," treated the catching, transporting, housing, handling, feeding, and working with dolphins in order to be worthy of borrowing them from nature. It was his farewell to colleagues and his work before retiring completely.

In 1987, MV Cachelot was sold in the UK, and Dr. and Mrs. van Heel went to live in Vlissingen, Netherlands, at the very edge of the sea in an apartment seven stories above sea level with a full view of the mouth of the River Westerschelde and the open sea. Last year, they moved to "Ter Reede" ("On the Roads")—again, seven stories above sea level with a grand view over the old town and the lower reaches of the River Westerschelde, with world shipping moving in and out, and the sea onwards to the harbour of Zeebrugge, Belgium. Still always in touch with the sea.

#### **Notes**

- <sup>1</sup> The original set of lines of the dolphin, "Skinny," and that of a sperm whale (Buijs & Dudok van Heel, 1979) will be available through the "Historisch Archief," Dolfinarium, Harderwijk, Netherlands.
- <sup>2</sup> Copies of the six documentaries will be available from the same "Historisch Archief."



Van Heel in contemplation, 1986, with his Dutch barge, MV *Cachelot*, in the background, moored alongside a jetty of the East Cowes Yacht Harbour, Wight, UK.

# Aquatic Mammals: A Journal and an Association

## Dr. Willem H. Dudok van Heel

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Thankfully dedicated to the late Mr. E. F. den Herder, the devoted founder of the Dolfinarium Harderwijk

#### Introduction

It all started in 1956 when the Dutch otolaryngologist, Dr. F. W. Reysenbach de Haan (1917-1978), earned his Ph.D. on the important, privately printed thesis (in Dutch) *De Ceti Auditu*, which appeared as "Hearing in Whales," in the *Acta Oto-Laryngologica* (1957). I had early knowledge of his work and, after passing my Master's exam in June 1956, we got together to make plans. I intended to pursue his anatomical work by determining the acuity of directional hearing in a live Harbour porpoise (*Phocaena phocaena L.*).

A search for a suitable locality was needed, and I followed a lead that there was a seasonal beach park in Harderwijk, the Netherlands, with a pool dug out in the sand where sea lions and seals were kept and shown to the public. In September, with the seasonal closure of the park at hand, I met the eldest director, Mr. E. F. den Herder (1917-1975) and told him of my ideas and plans. He was very interested and ready to assist me. Confidentially, he told me that his present day sea lion pool, the "Robarium," was actually a "try-out." His vision was a dolphin establishment, "like there are in the USA," and he was secretly searching for a dedicated zoologist to assist him. We parted, keeping things to ourselves for the time being, but each with a task. I was to prepare for the zoological task, and Mr. den Herder was to plan his organisation.



A rare photograph of Mr E. F. den Herder (1917-1975) looking down into a pool, approx. 1969

Two months later, I was asked to join the staff of the Zoological Station, Den Helder (now the Netherlands Institute for Sea Research at Texel). Here, I had the opportunity to start in earnest. In the autumn and winter 1957/1958, I, in close cooperation with G. J. de Haan, director of the Texels Museum (now Ecomare, Texel, The Netherlands), led an expedition to Denmark to catch Harbour porpoises for the intended scientific research in Holland. Mr. E. F. den Herder, cosponsoring the expedition; his beach manager, W. Nuis; and Dr. Revsenbach de Haan accompanied us actively in the actual catching. This led to my thesis, Sound and Cetacea (1962), which not only focused on the acuity of directional hearing of the Harbour porpoise but also offered a solution to the mystery of mass strandings of Cetacea.





Photo at the top: A small crowd of visitors waiting for access to the next show before the domed building in 1970 or 1971. On a busy day the whole slope and more would be packed with people. Photo below: Van Heel's true companion G. J. de Haan catching Harbour porpoises in Denmark November 1957.

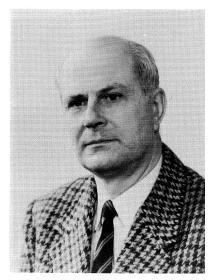
In 1963, the U.S. Office of Naval Research (ONR) invited Dr. Reysenbach de Haan and me each to read a paper at the first Symposium on "Whales, Dolphins and Porpoises" held in Washington, DC that year (Norris, 1966). We met many colleagues with whom we had been corresponding for years. In addition, with ample time on our hands, the U.S. ONR kindly invited us to visit Florida to meet Dr. F. G. Wood and his staff at Marineland of Florida, Dr. John Lilly at his private facility, and Dr. J. White at Seaquarium in Miami.

Shortly after my return from the United States, I visited Mr. den Herder to report and told him I felt ready to proceed. He, in turn, told me he intended to start definite planning and building in the course of 1964 if I would be prepared to join him in his new enterprise. I agreed on the collaboration based on three conditions to which he readily agreed because they also would benefit the future establishment. I will return to these conditions later.

Everything went as planned, and we were able to commence this project after the summer of 1964. But what should it be called? Because the "Robarium"



Dolphin presentations by the Duisburg Zoo to EAAM members in 1973



Dr. F. W. Reysenbach de Haan (1917-1978)

was popular among the visitors at Harderwijk and in Dutch a dolphin is a dolfijn, I suggested we create a similar name. So, in July 1965, the "Dolfinarium" opened its gates, and we experienced a flood of visitors, far exceeding Mr. den Herder's and my expectations. Clearly, the new enterprise was a success and gave our vision room to expand. Honesty forces me to relate that our venture received an enormous boost when, by pure chance, in the winter of 1964-1965, Dutch television put the *Flipper* show on the screen and "everybody" wanted to see real Flippers. Interest was sustained and even continued to increase in the years to come.

The animals we obtained were specially caught for us in the wild, a situation which prevailed for many years. This was not only done for Dolfinarium Harderwijk but also for a growing number of new establishments in Europe and elsewhere.

In my opinion, "this borrowing from nature" could certainly put a strain on the dolphin population in the wild and in the Florida waters in particular. This placed an obligation on all of us, and I was pleased that Mr. den Herder agreed with my original three conditions:

- Research was needed to improve the care for and well-being of our animals in every respect; this would not only have to be undertaken by but also paid for by the Dolfinarium.
- Educating the public, schools, or students in every possible way should be incorporated into our presentations—that is, animals demonstrating the use of sonar in the shows, building an exhibition annex, and close cooperation with producers/directors in making documentaries.









Shows in 1965 and 1966. In the winter 1965-1966, a shelter roof was made over the stadium around the show pool. The figure in labcoat is van Heel, present at the beginning of the show to give a kind of lecture.

3. Being convinced we would be successful and would have healthy animals at our disposal, my final request was that scientific research be allowed to be conducted by qualified scientists from an official university, by comparable independent institutions, and by me. However, financially speaking, I knew it was difficult to predict the future. Therefore, I stated right from the beginning that all expenses for scientific research would have to be met from external sources.

Before our Dolfinarium opened, one in Morecambe, UK, a small establishment, became the first establishment in Europe to keep dolphins permanently. During the winter, while we were building, Mr. J. Tiebor roamed through Western Europe with a travelling dolphin show. A few months after our opening, Duisburg Zoo, BRD, opened their dolphin establishment. It was not long before its director, Dr. W. Gewalt, and I were in contact and developed a very good working relationship.

In addition, with the growing number of establishments keeping live dolphins, a new branch of science (applied this time) entered the field of marine mammalogy. In 1968, in the United States, the cradle for keeping dolphins, a group of veterinarians founded the International Association of Aquatic Animal Medicine (IAAAM); this was particularly valuable as it organised an annual symposium.

From Europe, to my surprise, only Prof. Dr. Sir R. Harrison the three British veterinarians working in the field (Messr. D. Taylor, DVM, A. Greenwood, DVM, and V. J. A. Manton, MRCVS, Director of Whipsnade Zoo) and myself participated in these symposia. But the papers resulting from these symposia and from other sources were still published far and wide.

In my opinion, marine mammalogy, a field of basic and applied science alike, had come to have its own



The original show pool in the first days of July 1965, just before opening day



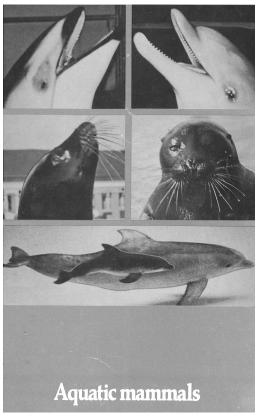
Coffee break at EAAM meeting, Duisburg, 1973. Person most to the right, looking left is my old comrade in arms Victor Manton; and the second from the right, with little beard, is my head trainer Martin Huigen (Münster, BRD) in those far-off days. The uppermost person to the left is Dr. Wolfgang Gewalt.

niche. Therefore, in the autumn of 1971, I decided, having obtained the cooperation of Mr. den Herder, not only to start the journal, Aquatic Mammals, but also to invite nine European friends and colleagues<sup>1</sup> to meet at the Dolfinarium Harderwijk in February 1972 to discuss the European situation. All of them accepted this invitation. However, with the end of 1971 approaching, Mr. A. Greenwood informed me that he had mentioned my idea of the meeting to others who appeared also to be eager to join in and would I be so kind as to extend the invitation to them? Mr. den Herder and I discussed this request and its implications thoroughly and concluded that we should proceed. Within three weeks, 54 participants from 10 European countries, Bermuda, and Japan had booked for the "Symposium Dolphins and Dolphinaria" to be held on February 10-11, 1972, in Harderwijk, Netherlands. At rather short notice, a few things had to be organised.

Chairman Dr. F. W. Reysenbach de Haan and eight other speakers gave 13 lectures,<sup>2</sup> and three of the attendees led a panel. A program with abstracts to hand out to all participants was prepared, and the Dolfinarium hosted a dinner on the evening of the first day.

### The Journal

In January 1972, Volume 1, Number 1 of *Aquatic Mammals* was distributed among my contacts worldwide and also handed out to the participants at the Symposium. This first issue contained only one article, "Transport of Dolphins," which was read at the Symposium. In September 1972, the



Covers Vol. 1-2

second issue was published, containing six articles, four of which were read at the Symposium. Volume 1, number 3 appeared in July 1973. Volume 2 numbers 1, 2, and 3 appeared in June, November, and December 1974. The journal, having been established, continued with Volume 3 (1975) and Volume 4 (1976), with two issues each year, and from Volume 5 (1977) onwards increased to three issues annually. Mr. Victor J. A. Manton joined me as coeditor from Volume 1, number 2 onwards with Dr. F. W. Reysenbach de Haan as my co-reader. The latter joined us as an editor from Volume 2, number 3 onwards, with me acting as Managing Editor. At that time, the journal was still partly sponsored by the Dolfinarium; this support decreased progressively as the number of subscribers increased.

Right from the start, the journal was meant to be an independent entity and no part, in any way, of the public relations activities of the Dolfinarium. The journal had its own letterhead with a logo—that still adorns the latest issues (Volume 35, 2009)—which was designed by my assistant Miss M. Mettivier Meyer in 1971.

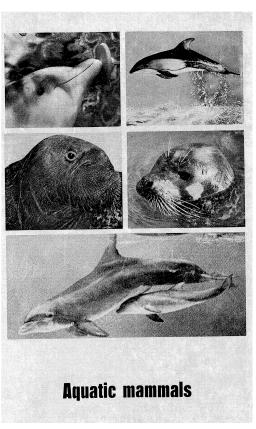
In the autumn of 1978, with Volume 6, number 3, about to appear, the Netherlands Foundation for

Aquatic Mammal Research took over the publication expenses of the journal from the Dolfinarium now that it had enough subscribers. This facilitated my original intention that the European Association for Aquatic Mammals (EAAM) eventually would have its own voice.

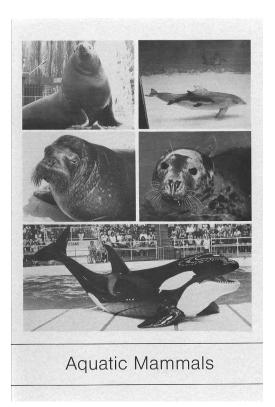
After Volume 10 was published, I, having left the field and therefore having to resign from the Association, handed over my task as Managing Editor to Mr. Manton. When Volume 11 went to press, the EAAM finally took the journal over completely and achieved its own voice.

#### The Association

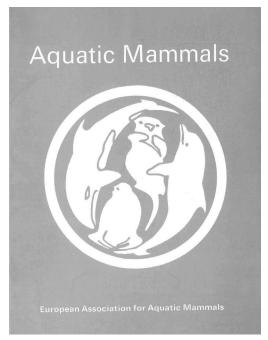
Returning to the Symposium, at the dinner on 10 February 1972, I addressed the audience and reminded them about the importance of the protection of dolphins in the State of Florida and the upcoming signing of the U.S. Marine Mammal Act (1972). I proposed that the participants of each of the countries present would approach their respective governments, asking them to protect all aquatic mammals (i.e., Cetacea, Pinnipedia,



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Mustelidae [*Lutra* sp.], and Rodentia [*Castor* sp.]) in the wild within their countries and regulate the conditions for keeping these animals (Sirenia included) in captivity. Impressed in particular by the preceding lectures of Dr. P. H. J. van Bree (University of Amsterdam), all participants agreed to comply. In time, it became clear that, by and large, this proposal was indeed a success.

Secondly, I proposed the foundation of the European Association of Aquatic Mammals. This proposal was very well-received, and Dr. W. Gewalt immediately offered to organise the next symposium at the Duisburg Zoo in 1973. In the meantime, the plan was that Dr. Gewalt and I would draft the necessary official Constitution and Bylaws required to found the EAAM. The next day, this initial Symposium was brought to a successful conclusion.

#### The Formation

With the Laws and Bylaws of the IAAAM at hand, we drafted our own set. The most important difference from the American set was the membership definition. In the IAAAM, only veterinarians, now also in the field, could be Full (voting) Members. The traditional zoologists and medics in the field (invited and actually needed to organise these successful symposia with valuable lectures in addition to the veterinarians' own input) could only become non-voting Associate Members. At that time (also among a number of veterinarians themselves), there was some unease on this point. Some years later, the membership rules were changed, and zoologists and medics working in the field also were made true Full Members.

At the same time in Europe, voices turned up to prohibit the keeping of dolphins altogether because the animals had large brains like humans. The book by Dr. John Lilly (1962) and the *Flipper* TV show were quoted as "proof" of the extraordinary status of these animals in nature.

In order to show that the new association was seriously organised and could meet governments at a proper and adequate level—for example, to assist in the care of stranded animals—Dr. Gewalt and I suggested that, at least at the start of the new association, Full (voting) Members should be university-trained zoologists, medics, or veterinarians working in the field of aquatic mammals.

However, to encourage non-university trained persons who owned (i.e., ran) establishments (dolfinaria as they tend to be called now) to join us and to keep effective contact both ways (aiming at high standards), we introduced an Institutional (voting) Membership—that is, one person per establishment. All other individuals, trainers, and those interested and working in the field would become non-voting Associate Members.



Mr. E. F. den Herder (left) or "Mr. (Meneer in Dutch) Frits" as we all knew him.

Dr. Gewalt and I sent the proposed Constitution and Bylaws to Dr. Reysenbach de Haan and D. Taylor, DVM, for comments. In 1973, we presented the revised set at the Foundation Meeting of the EAAM at the Duisburg Zoo, Germany. The proposed Constitution and Bylaws were approved, and the Association became a reality. I was the first Secretary/Treasurer of EAAM, and later I served as President-Elect and President.

#### Acknowledgments

Mr. E. F. den Herder, a very modest man, loved by all who worked with and for him, thoroughly disliked the limelight. He heartily supported the Symposium of 1972 and allowed the Dolfinarium to host the dinner on the first evening, although he did not participate himself. As he once said to me, "That's also why I took you on board, to shield me from all that." At heart, however, he was very proud to see everything that was developing. The EAAM and the journal definitely owe him the utmost gratitude in getting us afloat.

A sudden heart attack on 17 September 1975 took him away too early. He was intensely missed by all around him. Two months later, his heir unfolded to a small nucleus of his staff a devastating, in our opinion, new vision for the future of the Dolfinarium. On 1 December 1980, I was dismissed but allowed to finish my running research project (Dudok van Heel et al., 1982).

In 1981, the "new vision" led to Court proceedings resulting in the young owner and his financial director being convicted of fraud. However, the small nucleus of deeply concerned ex-employees was totally exonerated. We still feel the bitterness of having had to defend Mr. E. F. den Herder's threatened valuable heritage—not only because

of its importance with respect to the community of Harderwijk. Fortunately, a new foundation secured the existence of the Dolfinarium, leading eventually to new ownership.

The 40th anniversary of the opening of the Dolfinarium took place in 2005. We are now looking forward to the same anniversary of the journal, the oldest in the field of marine mammal science, and of EAAM in 2012-2013. I feel proud to have lived to see Mr. E. F. den Herder's and my vision coming to fruition.

Thankfully, I recall the cooperation of friends and colleagues Dr. S. Andersen, Dr. P. H. J. van Bree, Dr. W. Gewalt, A. Greenwood, DVM, V. J. A. Manton, DVM, D. Taylor, DVM, and the late friends Mr. A. Dral, Prof. Dr. Sir Richard Harrison, C. van de Hurk, DVM, Dr. C. Kamminga, Dr. P. E. Purves, and Dr. F. W. Reysenbach de Haan.

I thank our Managing Editor, Prof. Dr. J. A. Thomas, and Co-Editor, Dr. K. Dudzinski, for inviting me to tell the story, and my British son-in-law, Mr. P. C. Taylor, for reading the original manuscript, giving his appreciated essential literary comments, and making it ready for submission.

#### **Notes**

- <sup>1</sup> From Denmark, Dr. S. Andersen; from Germany, Dr. W. Gewalt; from the Netherlands, Dr. P. H. J. van Bree, Mr. C. van de Hurk, and Dr. F. W. Reysenbach de Haan; from the UK, Mr. A. Greenwood, V. J. A. Manton, Dr. P. E. Purves, and D. Taylor.
- <sup>2</sup> The Preface of the journal, *Aquatic Mammals*, Volume 1, Number 2, contains the list of speakers, their lectures, and the intended place of publication. The intended publication in Volume 1, Number 3, of the Proposal for Legislation did not take place after all. Neither did my lecture on pool design and water purification at that point.
- <sup>3</sup> In Dudok van Heel (1962b), I described the successful long-distance transport of dolphins by road with the animals resting in water in watertight compartments. In Dudok van Heel (1972), an honest but inferior stage in the development of long-distance transport of dolphins by air is shown when the airlines charged us by weight. Later on (see Dudok van Heel, 1986), fortunately for the animals, the airlines wanted to earn more money and started to charge for transport by volume. Once this happened, we could resume this method for transporting the animals in water.

## **Concerning Photographs**

Page 399. Photograph of Dr. van Heel taken by W. H. Dudok van Heel Jr. at the request of the *Aquatic Mammals* editors.

Page 402. Photo taken by Mr. A. Hage, MD, a guest on board *MV Cachelot* at that time.

Page 403. *Top:* From private collection of Dr. van Heel. *Bottom:* This one was taken by J. Bokma, photographer with periodical *Artis* (*Amsterdam Zoo*) while with us in Denmark 1957. It was printed as one of the many illustrations in Vol. 3, No. 6, March/April 1958, pp. 200-216, with article "Bruinvisvangst in Denemarken" ("Porpoisecatching in Denmark"), by the editor H. v. d. Werken, who joined us in autumn 1957 too.

Page 404. *Left column:* If I recall properly, these photos were taken by the Duisburg Zoo as was the top one, right column, page 406. *Right column:* Reysenbach de Haan. He was married to a cousin of mine, who gave me the photo for my "In Memoriam" (Dudok van Heel, 1978).

Page 405. All photos from my private collection. *Lower left photo:* Trainer H. v. d. Zee and "Moby."

Page 406. Photos, except top right (see remark above for page 404), from my private collection. Pages 407-409. From my private collection.

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