

THREE LOST AQUARIUMS IN OSTEND, BELGIUM

BY GIE ROBEYNS

Introduction

Thirty years ago, on 11 August 1977, the present North Sea Aquarium in Ostend was opened to the public. This aquarium, which is owned by the city of Ostend, is located on the Visserskaai in the previous shrimp market. In this small aquarium visitors can get to know some 30 species of fish and more than 40 of lobsters, molluscs and sea-anemones living in the North Sea. There is also a small exhibition of North Sea shells, crustaceans and echinoderms.

But only a small number of people know that Ostend was the home of one of the first aquariums in Belgium. Indeed, a public aquarium was opened as long ago as 1894. Afterwards two other aquariums were founded, in 1922 and 1939, but each of them existed for only a short time. It is noteworthy that the Royal Zoological Society of Antwerp (R.Z.S.A.), owner of Antwerp Zoo and the Planckendael Wild Animal Park in Mechelen, was involved to some extent in all three initiatives.



The present North Sea Aquarium, Ostend. (Photo: Eddy Enema)

SEA AQUARIUM (1894–1914)

It was the wish of many people that Ostend should have its own aquarium. In 1892 the question was raised in the paper *L'Echo d'Ostende* and reference was made to similar initiatives abroad (Amsterdam, Roscoff, Brighton, Le Havre etc.). The article pointed out how important it would be for Belgium, and especially for Ostend, that such an aquarium should exist. New installations and special developments in aquariums abroad were often mentioned in the Belgian press, and this too was undoubtedly a stimulus to create a similar tourist attraction in Ostend.

During the period of Dutch–Belgian union (1815–1830) a new period of prosperity started for Ostend, and tourism also became more important. With the inauguration of the new Ostend–Brussels railroad in 1838 and the Ostend–Dover boat connection in 1846, the city became much more accessible. This was the reason for improvements to the tourist infrastructure – for example, the construction of a casino in 1852 and a new one in 1875, the building of a railway station in 1882 and the laying-out of the Hippodrome in 1885. The establishment of an aquarium, although less spectacular, made very good sense.

But in the late 19th century the creation and management of an aquarium was not a routine matter. Knowledge of marine fauna was limited, and especially of such factors for keeping fish alive as water temperature, salt and oxygen levels, feeding, etc. All too often this resulted in empty aquariums after only a short time in existence. It often took many years of study and tests to overcome the main problems before visitors could see a number of species. But from the start the first aquarium in Ostend was managed well. Although small difficulties existed, it was only the outbreak of World War I that brought this initiative to an early end.

Back in time

In fact a small aquarium had already existed in Ostend 50 years earlier, but it was not open to the public, being part of a scientific marine laboratory created in 1843. The head of this private initiative was Professor Pierre-Joseph Van Beneden (1809–1894) from Leuven. It was one of the first of such installations, and many eminent scientists came to this 'Laboratory of Marine Zoology' to work with Van Beneden. The laboratory existed for almost 30 years.

In 1883 a second effort was made to create a marine laboratory. This time the originators were two universities, Ghent and Liège, but the project ended after only one season.

The beginning

At last, in 1893, the first move to open a public aquarium was made. A small group of residents of Ostend took the initiative and created a society. The most important originators were three well-known citizens. Heading the group was Edouard Lanszweert (1833–1906), a retired chemist and the most important financial backer for the project. He is said to have been a distinguished connoisseur of molluscs and, as an amateur ichthyologist, he had connections with the Natural History Museum in Brussels. Another member of the club was G. Cobbaert, an electrical engineer. But by far the best known was F. Le Bon. Le Bon was a professional photographer who established a studio in Ostend in 1877. It was he who managed the aquarium in the most efficient and practical way. Either alone or with Lanszweert, he made several study tours to other

aquariums in the Netherlands, Britain, Germany and France to get to know the problems they experienced. From the beginning they bore in mind this important information and thus avoided a lot of problems. These three men decided to open the first public aquarium in Ostend at their own cost and risk. But from the start they had a higher goal in mind: they many times indicated that the aquarium was founded with a pure scientific object in view – to give Belgium a 'model' of a marine laboratory.

Location

The aquarium was accommodated in the solid vaulted cellars under Le Bon's photography studio on the corner of the streets Van Iseghemlaan and Louisastraat. These cellars dated from the Dutch period (1815–1830) and were for a long time used as casemates for artillery, but were out of use by the late 19th century. Work started in February 1894, and only a few months later, at the end of June, the first part was finished. On 30 June the new attraction was shown to city dignitaries and the press, and on 1 July the summer season started. The aquarium received a very positive welcome from the citizens, press and public authorities.

On the small square, in front of Le Bon's studio, stood a pavilion, an angular, dark wooden building, in which a staircase led to the cellars. The entrance was in full view from the Casino and other places, so it was in a well-chosen central location, close to the sea and the dike.



The Van Iseghemlaan with, in the middle, the small pavilion of the aquarium. (Postcard)

Infrastructure and technical equipment

The total premises consisted of four cellars. Two were prepared for the opening of the aquarium, and the others followed a year later. Reports differ as to the size of the aquarium. A first source (1896) mentions 600 m² with a 40-metre frontage

on the Van Iseghemlaan and the Louisastraat, but according to a second source the aquarium was much smaller, 492 m², with 25 m on the Van Iseghemlaan and 17 m on the Louisastraat.

At the end of the 19th century and the beginning of the 20th, some aquariums already existed, but it was often a great problem to keep the collection alive. A lot of initiatives never succeeded. That the one in Ostend was a success was thanks to the motivation of the three originators and the studies they made at other aquariums before starting. But the fact that the aquarium was underground was also to their advantage. Marine fishes don't like big changes of temperature, and in the cool cellars extreme temperatures and violent fluctuations were avoided. Not only the temperature of the water but also its oxygen content is important. This was certainly understood by the management, for a good ventilation system was installed and kept working day and night.

The most modern techniques available were used to keep the fishes in optimal conditions. The water was constantly refreshed, filtered and supplied with oxygen. For this purpose an Acme gas engine, a few water pumps and the newest model air pump, recommended by the Natural History Museum in Paris, were used. All this technical equipment provided the aquarium with crystal-clear water. The water used came from the North Sea nearby. Two sketches which I found in the archives of the R.Z.S.A. make clear how the supply pipe came from the sea via the Louisastraat to the aquarium. At high tide the water was pumped over, filtered and stored in six reserve tanks with a total capacity of 250 m³ before being distributed to the different display tanks.

The animal collection

Two of the four cellars were for freshwater species and two for saltwater ones. At the start some 20 tanks were used, but from the beginning the originators planned to enlarge the section for sea fishes. An inventory of the fish species has not been found, but a description of the aquarium, published in 1896, mentions that a great variety of fish species from the North Sea were present. Fishes from the Atlantic Ocean were also kept, and Le Bon used his business interests in the Antilles to bring exotic marine animals of that region to Ostend.

The following species were present in 1894: barbel (*Barbus barbus*), roach (*Rutilus rutilus*), goby (*Pomatoschistus microps*), pike (*Esox lucius*), carp (*Cyprinus carpio*), perch (*Perca fluviatilis*), trout (*Salmo trutta*), salmon (*Salmo salar*), eel (*Anguilla anguilla*), bream (*Abramis brama*), pipe-fish (*Syngnathus* sp.), ray (*Raja* sp.), haddock (*Melanogrammus aeglefinus*), plaice (*Pleuronectes platessa*), turbot (*Psetta maxima*), cod (*Gadus morhua*), conger eel (*Conger conger*), sardine (*Sardina pilchardus*), dogfish (*Scyliorhinus canicula*), whiting (*Merlangius merlangus*), halibut (*Hippoglossus hippoglossus*), lobster (*Homarus vulgaris*), spiny lobster (*Panulirus interruptus*), hermit crab (*Pagurus bernhardus*), shrimp (*Crangon vulgaris*), and sea anemones (*Actiniaria* spp.).

A report of 1902, published by the management, stated that the collection, and the tanks, had been enlarged. It was now possible to show amphibians and seals, but how these were kept is not known. Also, as an amateur marine biologist, Lanszweert came up with the idea of putting his large collection of shells and other marine items on display in a small museum forming part of the aquarium.

Visitors

With about 70,000 inhabitants, Ostend is now one of the larger cities on the

Belgian coast. The number of tourists, both day trippers and those staying for longer periods, is very high, and in 2002 almost 1,100,000 overnight stays were registered. But of course more than 100 years ago things were completely different. The population in 1900 was under 40,000, and most visitors arrived on day trips by train. One of the intentions of the originators was to lure these tourists to the aquarium. In the 1904 Baedeker travel guide the Ostend aquarium gets a very brief mention – 'In the Van Iseghemlaan, a few steps along on the right, is a small aquarium.' There is no reference in the publications of Gustave Loisel, which is surprising as at about this time he made a very comprehensive study of previous and existing zoological gardens, aquariums and other zoological collections.

During the first years the aquarium was only open for three months a year, later increased to five or six months. The number of visitors fluctuated between 14,000 and 21,000 paid visits. In 1910 there was a decrease because the cheap summer trains to the coast were cancelled and also an international exhibition was held in Belgium. A great many schoolchildren – from 1,600 up to more than 3,000 – also visited the attraction each year free of charge. The aquarium was temporarily closed in 1899 and 1900, but I have not found out what were the reasons for this.

Finance

The aquarium had a positive reception and, after a discussion in the municipal council, the city of Ostend paid a yearly subsidy towards its costs. The Belgian government was also asked for a subsidy, and on 19 February 1898 this request was supported by a letter from six biology professors of the University of Ghent. The various reasons they gave are of some interest:

- other European countries (including the Netherlands) each had at their disposal a scientific institution on the coast;
- Belgium had four universities and a large and not undistinguished coastal strip;
- for scientific investigations scientists always had to travel abroad, with resulting expenses;
- this being so, it was impossible to have live marine animals available in order to give practical lessons to university students.

Together with a subsidy for their daily work during the summer season, the management also wanted an increase in order to set up a marine laboratory. If a supplementary subsidy was given, they agreed to offer free admission to all school parties, regardless of where they came from. And scientific institutions would always receive fish free of charge, except for the costs of transportation. The Belgian government was not open-handed: they asked advice from well-known scientists, universities, etc., but often took a reserved – i.e. negative – attitude. It was a few years before they agreed to give a subsidy, and a very special role in this decision was played by Professor Gilson, who was among other things director of the Royal Museum of Natural History of Belgium in Brussels.

Future plans but 'the end'

The originators always had plans for the future. A larger aquarium, more visitors, but especially an effective scientific role and links with universities and scientific institutions, were the targets of the management. But World War I

decided otherwise. During the war Ostend was not spared and the aquarium was destroyed by a bombardment. Almost 20 years later, however, this aquarium was to open its doors to the public again for a short time.

SEA AQUARIUM (1922–1928 (–1946))

On 19 July 1922 an advertisement was published in the paper *Le Carillon* promoting a Sea Aquarium on the Boulevard Van Iseghem. This was described as a sub-station of the aquarium at Antwerp Zoo. Although the building and installations in Ostend had been destroyed in 1914, the first marine aquarium on the Belgian coast was repaired and started a second life in mid-1922.

Re-establishment and inauguration

In 1908 the board of directors of the R.Z.S.A. made the decision to build an aquarium in Antwerp Zoo. Architect Emiel Thielens, designer of numerous buildings in the zoo, was offered this new project and he delivered a plan in 1909. The work started the same year and the new aquarium opened in 1911. It consisted (and still consists) of freshwater and saltwater departments and a smaller tropical room, and the water is still filtered in a fully biological way, almost exactly as it was 100 years ago. At the inauguration the press was very enthusiastic. In a special edition, the paper *Petit Journal de Paris* described the new aquarium as 'the most extensive and the best structure in the world.'

In the report of a general meeting of the R.Z.S.A. on 29 July 1923 we find different reasons why the society needed this small aquarium in Ostend. It was difficult to obtain sea fish from fishermen and Antwerp Zoo's requests were often ignored. Moreover transporting them wasn't easy, especially in the warmer summer months. So to acclimatise the fish before transportation it was necessary to use the facilities in Ostend.

World War I and the difficult years afterwards were no doubt the reason why the scheme did not come into existence sooner, but the first steps towards using the facilities in Ostend had already been taken in 1914. In 1921 contact was made again with the owner of the aquarium. The press got to know about this, and in September 1921 a short article in the paper *De Duinengalm* noted, 'There are serious plans to use the aquarium in the Van Iseghemlaan again – very good,' and nine months later, 'People are working very hard to set up our aquarium that lured so many visitors before the war. We know that it will be the Royal Zoological Society of Antwerp who will re-open our aquarium.' Le Bon and



The imposing entrance of the Antwerp Zoo aquarium, 1911. (Postcard)



Another view of Antwerp Zoo aquarium, 1911, this time thronged with visitors. (Postcard)

Michel L'Hoest Snr (director of the R.Z.S.A. from 1905 to 1930) signed an agreement for 20 years at a rent of 6,000 Belgian francs a year.

Now that the R.Z.S.A. were certain they had a location to store fish temporarily before transportation to Antwerp, they began to renew the building and the installations. Because the facilities had been almost completely destroyed, considerable investment was necessary, and various contractors were asked to give quotations for the work of renewing the tanks, pumps and air filters, rebuilding reservoirs, paintwork, etc. Most of the work was done by the building firm Jules Vermeire-Rasschaert of Ostend. In the R.Z.S.A. archives I found the firm's offer to do the work for 18,300 francs, but the total cost was actually much higher – a report of the board of directors gives approval for expenditure of 23,800 francs. On Monday 17 July 1922 the aquarium was inaugurated for the second time, and to offset costs it was opened to the public during the summer.

Infrastructure

An agreement between F. Le Bon and the R.Z.S.A. dated 15 November 1921 gives some information about the infrastructure. The entrance at Boulevard Van Iseghem 36 was 4.3 m wide and 11.9 m long. A staircase led underground to three vaulted cellars in stone, three water cisterns, filters, a pipeline for sea water, and a service exit to the Louisastraat. The cellars were 21 m long and 10.65 m broad.

In contrast to the Antwerp Zoo aquarium, where salt water from the Mediterranean was used, the fishes in Ostend were kept in North Sea water. This meant that the water at the zoo was clearer and had a higher percentage of salt. The water in the reservoirs in Ostend was kept continually circulating by a system of pumps.

Animal collection

Thanks to the report of the official inauguration and the visit of the press to the aquarium we get a picture of the collection. The aquarium had the use of 22 large tanks. The animals originated from the Atlantic Ocean and, of course, the North Sea. The following species are mentioned: thick-lipped grey mullet (*Chelon labrosus*), plaice, cod, ray, bass (*Dicentrargus labax*), stingray (*Dasyatis pastinaca*), eel, sole (*Solea solea*), hermit crab, spider crab (*Maja squinado*), rock-dwelling crab (*Cancer pagurus*), lobster and langoustine (*Nephrops norvegicus*). At first only marine animals were exhibited, but it was intended, when tap water was available, to show freshwater fauna as well, to add to the interest and variety of the collection. In 1925 Antwerp Zoo experienced problems stocking the aquariums, and the head of the Department of Fishery in Ostend agreed to help with this.



A delivery of fishes from the aquarium in Ostend to Antwerp Zoo. (Photo: Antwerp Zoo archives)

The end of the aquarium – or not?

The original contract between Le Bon and L'Hoest was for a 20-year period ending on 31 October 1940. However, because the aquarium in Ostend was less profitable than expected, the R.Z.S.A. took advantage of a clause in the agreement to break the contract and close the aquarium to the public at the end of the tourist season in 1928. This was the final end of the public aquarium in Ostend. From 1 November 1928 the society only hired a smaller part of the site, with 12 reservoirs and the necessary equipment. A new agreement was signed with Le Bon's family and the rent was reduced to 3,000 francs a year. A citizen of Ostend, Leopold De Bever, was employed to maintain the building and look after the fish collection. He worked not only for the R.Z.S.A. but also for Le Bon.

Although the R.Z.S.A. had kept the aquarium public for seven years and, including the period of World War II, hired the infrastructure for 25 years, I found in the archives only a few letters relating to the restoration of the building and a few mentions in the reports of directors' meetings. Even in the large and public photo archives [see www.beeldbankzoo.be] there are no pictures of the aquarium in Ostend. Information about income, numbers of visitors, etc., is lacking too.

The definitive end

During World War II the facilities were not used for a couple of years. However the R.Z.S.A. still paid the rent and the wages for De Bever, the only remaining employee. In mid-1944 the society informed the owner by letter that they would stop paying the rent. De Bever, who had been evacuated by the end of the war, was asked to inform the director of the zoo, as soon as possible after his return, about the state of the premises. If necessary he could contact a qualified architect. In a first answer (November 1944) the director was informed of damage both by rain and by the bombardments of the city, and also told that the supply pipe for seawater had been partly, or completely, demolished by German soldiers.

In September 1945 Walter Van den Bergh, soon to be Antwerp Zoo's new director, confirmed that they wanted to work further with the facility in Ostend and that the location would soon be visited. But in fact, very soon after this positive statement, the decision was made to stop renting the building, and on 30 June 1946 the aquarium finally ceased to exist.

AQUARIUM PASTER PYPE (1939–1961)

The Sea Fishery School where this aquarium existed for about 20 years was called after Pastor Henricus-Fredericus Pype (1854–1926), who established this vocational school. 'Paster Pype', as he was called in Ostend, was a historic individual who as 'Chaplain of the Sea' was dedicated to the service of fishermen, and because of this he was very well respected.

The start

The origin of the fishery school goes back to 1888 when Pype founded it. It occupied various locations before finally moving into a new building on the St Petrus- en St Paulusplein.

Over the years director Pype and other staff of the school built up a fine collection related to shipping and sea fishery for the classrooms – not only drawings, compasses, models of ships and treasures from the sea, but also a great variety of fauna and flora. The fishermen were glad to help and contributed

rarities they caught. But especially Paster Pype, during his trips as chaplain on the Fishery Police cruisers, collected specimens from every depth of the sea, representatives of seabirds, fishes in different phases of development, and other organisms like anemones, sponges, starfish, sea urchins, crustaceans and molluscs. During the early years of the fishery school and thanks to several helpers this large collection formed the nucleus of what would later become a museum and the Aquarium Paster Pype.

On 11 June 1938 the foundation stone of the new school was laid. It consisted of two main buildings on the corner of St. Petrus- en St. Paulusplein and Paster Pypestraat. Two floors were provided as museum halls 27 m long, housing the most valuable parts of the collection, with the long-awaited aquarium for marine flora and fauna on the first floor. The architects for the building were Jos Vierin and Theo De Lee.

Inauguration

The official inauguration took place on Easter Monday 1939, the traditional 'Day of the Fisherman'. Because of the troubled European situation the festivities were very simple. Six months later World War II began and the museum collection had to be removed to a place of safety. After the German surrender the building was briefly occupied by the British, and it was 1946 before it could be put to its intended use again, both as classrooms and as a museum and aquarium. Indeed, according to a newspaper report, the museum and aquarium were not actually completed in 1939, so the finishing touches took place in 1946.

Infrastructure

The aquarium was built of concrete, with six compartments in a row, with the back windows looking out onto the Paster Pypestraat and the front facing the museum hall. The aquarium tanks were viewed through six glass panels almost 20 mm thick, rounded at the corners and framed with decorative stones. Each tank measured about 1.5 m wide, 1 m high and 0.75 m deep, with back and sides higher than the window so that the water surface was invisible to the visitors.

As the fish were all of cold water species a heating system was not necessary. A large seawater supply was stored in a 50-m³ reservoir under the playground with a filter consisting of sand, gravel and small boulders. The boulders had to be removed regularly for washing, but it took years before the water needed to be changed. A small cubby-hole in the playground housed an automatic, rustproof steel pump to send the water to the tanks on



Façade of the Museum and Aquarium Paster Pype. (Postcard)

the first floor.

Every tank could be filled or emptied individually for repair work, for maintenance or to change the background or design, etc. Each was fitted with lighting and a thermometer and was connected to a pipe supplying air from an almost noiseless compressor. A corner of each tank was furnished with a pile of stones, and the bottom was usually covered with white sea sand. For work behind the scenes – feeding the fish, etc. – there was a solid gangway behind the tanks.

The Royal Zoological Society of Antwerp again

Shortly after World War II the R.Z.S.A. briefly comes on the scene again. In the archives I found a letter, dated 26 June 1946, from Walter Van den Bergh (Director 28.04.1946–30.09.1978) confirming that the society agreed to pay for the restoration of the aquarium, but only after receiving an estimate of the costs. The manager of the Fishery School had to agree to care for live fish until they were transported to Antwerp Zoo. But the Aquarium Paster Pye would also gain by this cooperation, for the letter goes on, 'Not all the captured fish will be transported, so your visitors will always see animals in your aquarium.' But despite these good intentions, I could find no evidence that this cooperation was actually started.



A view of the museum with fish tanks in the background, Aquarium Paster Pye. (Postcard)

The end

After the war the museum and aquarium were well attended, especially by school parties and groups of tourists. But although the museum and aquarium

collections were interesting, there were some disadvantages – most importantly the fact that, the aquarium being on the first floor, a leak was discovered coming through the ceiling of the cafeteria underneath. Finally, in 1961, the aquarium was closed and an interesting and instructive institute disappeared.

Epilogue

Aquariums and marine laboratories attracted great interest in the late 19th and early 20th centuries. Indeed, several similar initiatives in or near Ostend were announced at this time, though none of them got off the ground. The three former aquariums in Ostend developed for a variety of reasons. The first initiative was very obviously in tune with the spirit of the time. People were interested in natural history and curious about the unknown animal world. From the start the originators had the 'higher' aim of creating a marine laboratory and working on a scientific basis in collaboration with other institutions. To inform or educate the public was also the purpose of the small aquarium Paster Pye. The museum and aquarium were not only for the pupils in the school but also open every day to the public. The R.Z.S.A. had another motive in reopening the 'small' aquarium in the Van Iseghemlaan – to facilitate the supply of marine animals to the 'great' aquarium in Antwerp Zoo. But although education and scientific research were, and still are, high objectives in the daily work of the R.Z.S.A., in Ostend this role was minor, as is confirmed by the closing down of the aquarium after a short time and the fact that little is found about it in the archives.

The present North Sea Aquarium continues the work of its predecessors. So far it has existed for 30 years – a long time compared with them. How long will this aquarium last? Hopefully, a long time, though the rumour goes that a new aquarium is being prepared for the near future. One thing is certain – Ostend and an aquarium belong together!

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